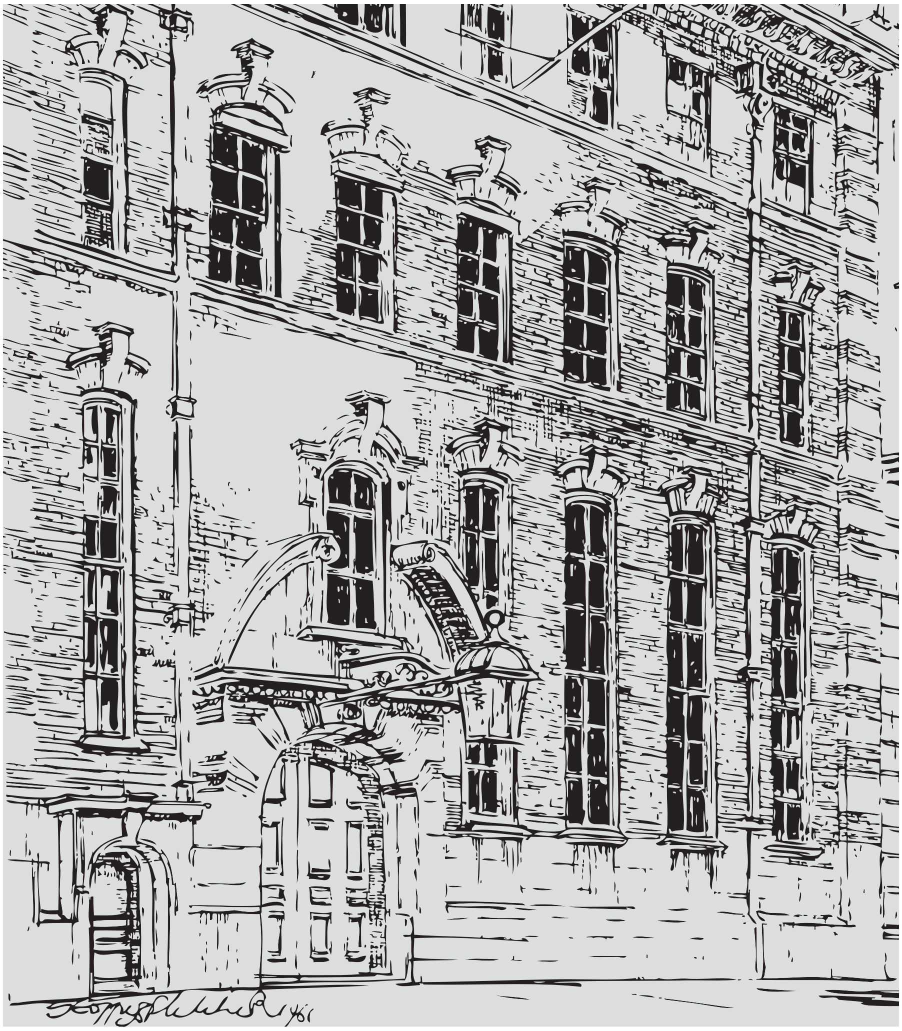
FINANCIAL HISTORY

THE MAGAZINE OF THE MUSEUM OF AMERICAN FINANCE



New Interactive Exhibit: Barings in America

Accounting: Our First Communications Technology

King of the Bucket Shops

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FINANCIAL HISTORY

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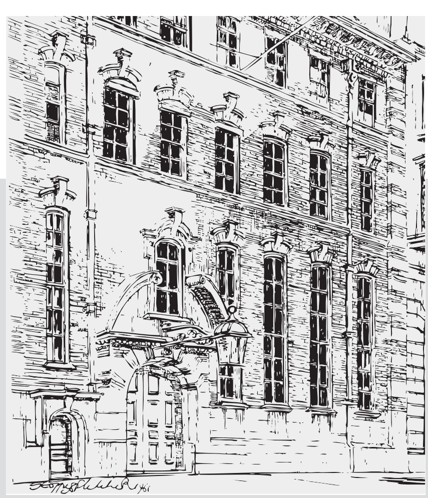
ON THE COVER

Barings' offices were located at No. 8 Bishopsgate, London, from 1806 until 1995. Drawing by Geoffrey Fletcher. See article, page 5.



Museum Update: 25th Anniversary and Close Call With Sandy

Message to Members

David J. Cowen | President and CEO

This fall brought two memorable events. The first occurred when super storm Sandy hit New York. As most members know, the Museum is only one short city block from flood zone A, the mandatory evacuation zone. As the storm was descending upon New York, our trustees and staff shared concern that our Museum, and in particular our archives, were vulnerable. We took precautions to keep our collections and exhibitions safe, and it is with great relief that I report we were left unscathed by the storm. It was a close call, as the high water mark of the surge came within 75 yards of the Museum.

Given the amount of devastation in the Downtown area, the fact that the Museum lost power, heat, internet and telephone for over a week was a small price to pay. We reopened to the public on November 6, but given there was no heat, admission was free for several days. Our thoughts and prayers go out to all the residents of Lower Manhattan and other areas hit by the storm, to the other Downtown museums, several of which have still not reopened, and to our staff members who were impacted by the storm.

We also want to thank the owners and building staff at 48 Wall Street. Kent Swig and his team did a phenomenal job not just preparing the building before the storm, but actually remaining in the building throughout the storm and its aftermath. We single out the building personnel of Joe Caraciolo, Bob Levey, Frank Fisler and Shawn Montague for exemplary service and dedication. Lastly, the storm caused us to delay the opening of our latest exhibit, "Barings in America: An Interactive Investment Experience." However, this exhibit is now open, and we encourage all members to visit and play the interactive game that accompanies the exhibit to see how you would stack up against one of the premier banks in history.

The second momentous event of the season was our 25th anniversary celebration on October 19, which coincided with the anniversary of the Crash of 1987. We commenced the day at the Museum with a special thank you and gift from the trustees to our founder, John Herzog. We are in the midst of a transition, as John has moved to *emeritus* status and has reduced significantly his time with the Museum. We are thankful for his continued support of the unique institution he founded 25 years ago.

The Museum's anniversary commemoration was followed by a thought leadership symposium titled "Restoring the Faith of Investors," which was held in the New York Stock Exchange Board Room. Three key financial leaders — Jack Bogle, Roger Ferguson and Duncan Niederauer — were interviewed by three leading journalists — Maria Bartiromo, Consuelo Mack and Jason Zweig, and the 90 attendees were senior-level financial executives and the heads of industry associations. The nation is still facing difficult economic times, and the topic of faith in the markets is of critical importance. As always, the Museum does not shy away from difficult topics, and we heard concrete suggestions that can be found on our website (www.moaf.org/news/announcements/000040). Following the symposium, the Museum's leadership rang the closing bell. We are grateful to the New York Stock Exchange for underwriting this event, and for their continued support of the Museum.

We have begun 2013 by honoring Bill Harrison with the Whitehead Award for Distinguished Public Service and Financial Leadership at our annual gala in January. In the new year, we are also looking forward to leading a new consortium of international finance museums expected to launch in April, and then a mid-year exhibit commemorating the 100th anniversary of the Federal Reserve Bank of New York. We are thankful to all of the individuals and institutions who continue to support us as we preserve, exhibit and teach about finance and financial history. $

Photo: Valerie Caviness

Museum Chairman Dick Sylla and President David Cowen at the Museum's 25th anniversary event.

JAN 1 1934 The Federal Deposit Insurance Company begins insuring retail bank deposits against the risk of insolvency.

JAN 1 1999 The Euro, the common currency of the 11 countries of the European Union, is launched.

"Barings in America" Interactive Exhibit Opens

On December 12, the Museum opened "Barings in America," an exhibit commemorating the 250th anniversary of the founding of Barings Bank, one of the most esteemed and important banks in history.

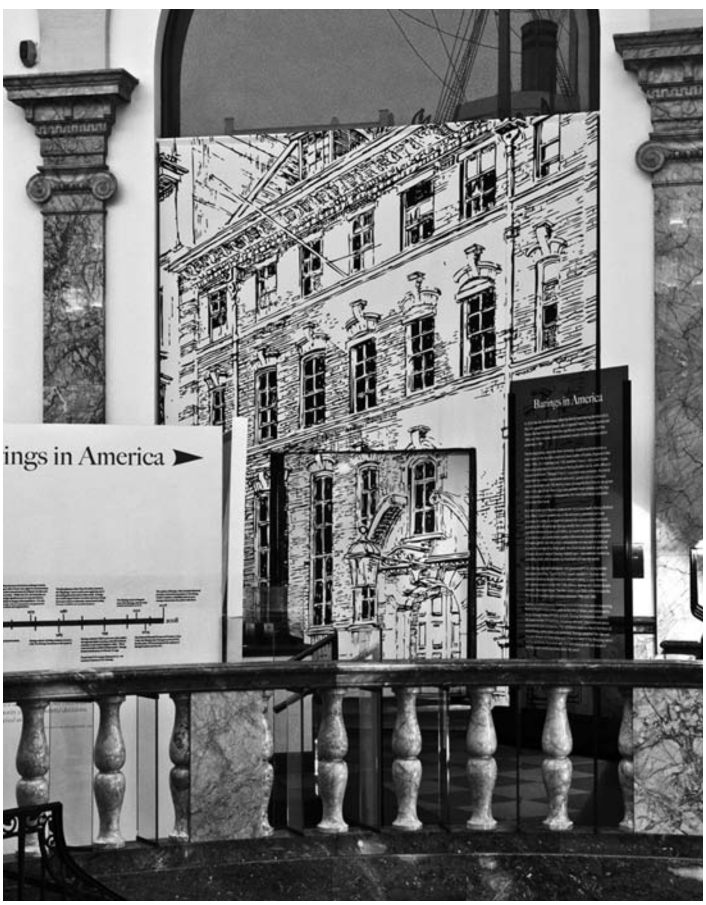
From its founding in the 18th century to its unforeseen demise in the 20th, Barings provided investment capital to many famous historical ventures, including the Louisiana Purchase in 1803 and the development of the North American railroad network during the 19th century.

Barings saw its share of both tremendous gains and miscalculated debacles. After unauthorized trading by an employee lost the bank £827 million ($1.3 billion) in 1995, Barings collapsed. The bank's legacy now lives on through The Baring Archive.

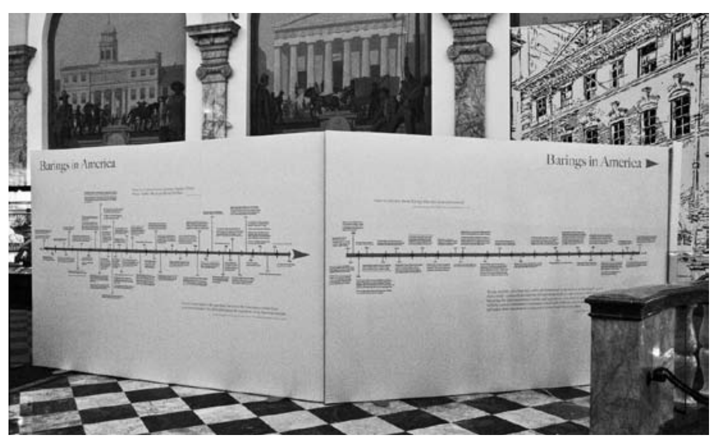
"Barings in America" provides engaging details about Barings' significant US investments and their contributions to the growth of the nation and its industry. Designed as an investment game with a mobile component (dividendconquer.moaf.org), visitors are invited to participate in five of the bank's American investments.

With unprecedented access to The Baring Archive, visitors utilize the same documents used by Barings to evaluate each historic investment. Based on information provided in the exhibit, the visitors decide whether to invest in each venture and compete against the investment performance of other visitors and the bank.

ING U.S. is the lead sponsor of this exhibit. Associate sponsors include Bank of America Merrill Lynch, Citi, Ernst & Young and Sullivan & Cromwell LLP. "Barings in America" will be on view through April 27, 2013. $



Photos: Arnold Kirschner



JAN 4 1865 The New York Stock Exchange opens its first permanent building at the corner of Broad and Wall Streets in Manhattan.

JAN 7 1825 The nation's first great non-financial IPO is sold as the Delaware & Hudson Canal Co. goes public at $100 per share.

Museum Commemorates 25th Anniversary with "Restoring the Faith of Investors" Symposium

On October 19, the Museum observed its 25th anniversary, along with the anniversary of the Crash of 1987, with a thought leadership symposium entitled "Restoring the Faith of Investors." This invitation-only event generated meaningful discussion amongst senior-level financial executives and industry association leaders and produced solutions for re-establishing the investing public's faith in the nation's financial markets.

The event began with a commemoration of the Museum's anniversary in its exhibit hall at 48 Wall Street, which was followed by a symposium in the NYSE Board Room and the ringing of the closing bell. The format of the speaking program was one-on-one interviews, with prominent journalists interviewing three industry thought leaders. Following the interviews, attendees discussed the proposed solutions.

Featured speakers included John C. Bogle, founder of The Vanguard Group; Roger W. Ferguson, Jr., President and CEO of TIAA-CREF; and Duncan L. Niederauer, CEO of NYSE Euronext. Participating journalists included Maria Bartiromo, anchor of CNBC's "Closing Bell" and anchor/managing editor of "Wall Street Journal Report with Maria Bartiromo"; Consuelo Mack, anchor/executive producer of public television's "Consuelo Mack WealthTrack"; and Jason Zweig, personal finance columnist at *The Wall Street Journal.* $

1. Museum Chairman Richard Sylla presents Founder John Herzog with an award commemorating the Museum's 25th anniversary. **2.** Vice Chair Charlotte Beyer, flanked by other members of the Museum's board, recognizes John Herzog for founding the Museum. **3.** Museum leadership prepares to ring the NYSE closing bell on October 19. **4.** CNBC's Maria Bartiromo interviews Roger Ferguson following the closing bell ceremony. **5.** Consuelo Mack interviews Jack Bogle. **6.** NYSE Euronext CEO Duncan Niederauer presents medallions to David Cowen and Richard Sylla. **7.** Trustees ring the closing bell on October 19. **8.** Trustees Andrea de Cholnoky and Consuelo Mack on the NYSE floor following the symposium.

1

2

Photos: Alan Barnett

JAN 8 1829 On the quietest day in Wall Street history, the market is open but not a single share of stock is bought or sold.

JAN 8 1973 The Reserve Fund, the first money-market mutual fund, is launched.

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Photos: Valerie Caviness

JAN 20 1870 The first female-owned stock brokerage is founded, as sisters Victoria Woodhull and Tennessee Claflin open Woodhull, Claflin & Co. at 44 Broad Street in Manhattan.

JAN 31 1940 The first monthly Social Security check is issued to Ida May Fuller, a 65-year-old retired legal secretary in Ludlow, VT.

New Acquisition: Educational Series Note

By Becky Laughner

The Museum recently added to its collection one of the most beautiful historical examples of US paper money. The Educational Series $1 note is renowned in the numismatic community for its detailed engraving, and it is generally considered to be among the most attractive and artistically-designed examples of US currency. The note was recently donated to the Museum by Trustee Mark Shenkman.

Educational Series notes are examples of early silver certificates, a type of legal tender introduced by Congress in 1878 and issued until the late-1960s. These notes could be redeemed for silver dollar coins or silver bullion from the Treasury. There were many issues of silver certificates, but the third issue, known as the Educational Series, is the most famous.

This series was issued in 1896 in denominations of $1, $2 and $5. It is easy to see where the notes got their name. The $1 note, shown here, depicts an allegorical scene of History instructing a youth with the US Constitution in the foreground. History points into the distance of a panorama of Washington, DC that features the Washington Monument and the Capitol building. The wreathed names of prominent Americans form a border around the scene.

The back of the note features the portraits of George and Martha Washington. In addition to the striking illustrations, this note is also significant because Martha's likeness is the only example of a woman's portrait on US paper money.

The other notes in this series also feature allegorical motifs with portraits of prominent Americans on the back. The $2 note depicts Science as a goddess presenting steam and electricity (represented by children) to Commerce and Manufacture (represented by women) with portraits of Samuel Morse and Robert Fulton on the reverse. The $5 note depicts Electricity as an allegorical female figure with portraits of Ulysses S. Grant and Phillip Sheridan on the reverse.

The Museum is excited to add such an important numismatic piece to its rapidly-growing paper currency collection. This note is currently on display in the Museum's permanent exhibition, "Money: A History." $

Becky Laughner is the Museum's Director of Exhibits and Archives.

CORPORATE AND FOUNDATION SUPPORT

The Museum is most grateful for the support of the following corporations and foundations who have generously provided funding for the Museum in the past year.

- The Adirondack Trust Company
- Alexander Foundation
- American Express
- Anna-Maria & Stephen Kellen Foundation
- Anonymous
- The Asher Family Foundation
- Aronson Johnson Ortiz
- Bank of America/Merrill Lynch
- Barrett Asset Management
- BlackRock, Inc.
- Blackstone Foundation
- Bloomberg
- The Briar Foundation
- Carter, Ledyard & Milburn, LLP
- CFA Institute
- Charina Foundation
- Citi
- CME Group
- Consolidated Edison Co. of New York
- Continental Grain Company
- Crane Co.
- DeWitt Stern
- Donaldson Fund
- Edward Jones
- Ernst & Young
- Fagenson & Co., Inc.
- The Felix & Elizabeth Rohatyn Foundation
- Fiduciary Trust International
- Financial Recovery Technologies
- Friedman Family Foundation
- Geduld Cougar Foundation
- The Guardian Life Insurance Company of America
- Henry & Elaine Kaufman Foundation
- Herzog & Co., Inc.
- ING U.S., Inc.
- Institute for Private Investors
- Lower Manhattan Development Corporation
- MacDonald & Cie
- Macy's and Bloomingdale's
- McKinsey & Co.
- McRoberts Protection Agency
- Morgan Stanley
- Muriel Siebert & Co., Inc.
- Nemco Brokerage, Inc.
- NYSE Euronext
- NYSE Euronext Foundation
- OTC Markets Group
- Peter Huberman Family Fund
- Peter Jay Sharp Foundation
- PNC Bank
- RRE Ventures
- PricewaterhouseCoopers
- Saber Partners, LLC
- Saybrook Capital
- Shenkman Capital Management
- Sullivan & Cromwell LLP
- Ted Moudis Associates
- Tishman Speyer Properties, LP
- Twenty-First Securities
- Wachtell, Lipton, Rosen & Katz
- Warburg Pincus
- Wells Fargo & Company
- W. R. Berkley Corporation

► For information about supporting the Museum's activities and programs, please contact Jeanne Baker Driscoll, Director of Development, at 212 908-4694 or jdriscoll@moaf.org.

FEB 8 1971 The Nasdaq Stock Market opens for trading, as the National Association of Securities Dealers Automated Quotation system first displays the median price for more than 2,500 "over-the-counter" securities.

FEB 12 1970 After 178 years, the New York Stock Exchange finally elects its first African American member, Joseph L. Searles III.

Museum of American Finance

$1 Educational Series note depicting History instructing a youth.

Museum of American Finance

Reverse of the $1 Educational Series note featuring portraits of George and Martha Washington.

FEB 24 1784 The Bank of New York is founded by Alexander Hamilton and several prominent New York businessmen.

FEB 25 1862 President Abraham Lincoln signs the Legal Tender Act, putting the US government in the business of printing paper money.

Don't Mess With My Gold: The Vigilantes of Montana

By Brian Grinder and Dan Cooper

Gold has motivated entire societies, torn economies to shreds, determined the fate of kings and emperors, inspired the most beautiful works of art, provoked horrible acts by one people against another, and driven men to endure intense hardship in the hope of finding instant wealth and annihilating uncertainty.

— Peter L. Bernstein

The territory of Montana, like California, was birthed in a gold rush. However, while the eyes of the nation were focused on California during the gold rush of 1849, the 1862 discovery of gold on Grasshopper Creek in southwestern Montana went largely unnoticed by a nation locked in the grips of a bloody civil war. The mining town of Bannack, described by prominent Montana historians as "a hell-for-leather berg," sprung up on the banks of Grasshopper Creek. With the onset of winter, residents quickly turned their attention from gold mining to survival. Mining resumed in the spring, and more miners flooded into the area from California, Nevada and the war-torn states in the East.

Bannack, located in the extreme western part of the Dakota Territory, was for all intents and purposes outside of the influence of territorial law. The Territory of Idaho, which included Bannack and most of western Montana, was created in the spring of 1863. Congress, however, failed to provide the new territory with any civil or criminal codes, which was extremely unfortunate given the degenerate natures of many who were attracted to the mining camps.

From its beginning, Bannack experienced many acts of lawlessness including the murder of Jack Cleveland by the soon-to-be-elected sheriff of Bannack, Henry Plummer. Plummer had had his share of scrapes with the law in spite of his previous career as a lawman in California. He had even served several months in the notorious San Quentin prison for the murder of his girlfriend's husband, but he was released due to failing health. According to Allen (2004), Plummer's "reputation for past violence seemed to work in his favor, since his fellow townsmen could appreciate the need for a man who commanded fear and respect to serve in the post." Perhaps Plummer was truly trying to turn his life around, but his close association with the ne'er-do-wells in the area, some of whom became his deputies, led many to wonder whether Plummer had truly turned over a new leaf.

Two days after Plummer's election, gold was discovered 70 miles east of Bannack at Alder Gulch. Cushman (1973) described Alder Gulch as "the richest single working in the history of mining." The gold workings at Bannack were largely abandoned as miners rushed to make their fortunes at Alder Gulch. Several towns appeared overnight in the Alder Gulch area, but the two most important were Virginia City, which later became the territorial capital of Montana, and Nevada City. Plummer stayed in Bannack but extended his authority as sheriff to Alder Gulch.

Nathaniel Langford, a resident of Bannack, was one of the first to write about vigilante activity in the mining camps. According to Langford, the early successful miners simply wanted to get out of Alder Gulch with their gold in the fall. "Failing in this, they knew that they would be doomed to a long winter of idleness, exposed to the privations incident to a new and isolated region, and to the depredations of a large and increasing criminal population." What Langford described as a "hegira" attracted the attention of the criminal element that saw an opportunity to relieve miners and merchants of their gold. Although the number of hold-ups was overestimated by Langford and others, several robberies occurred in the fall of 1863, which made the residents of Bannack and Alder Gulch very nervous.

The tipping point came in December of 1863 when a young German immigrant named Nicholas Tiebolt was murdered and stripped of the gold his employer had given him to purchase a pair of mules. George Ives, the main suspect in Tiebolt's death, was immediately captured, and a miner's court was assembled in Nevada City to try him. Ives was found guilty and hanged on the spot. The defendant was led swiftly to the gallows because in previous miner's court cases for murder, defendants found guilty and sentenced to be hanged were able to get their convictions overturned by appealing to the crowd.

The most notable instance of this happening was the trial of one of Plummer's deputies, Buck Stinson, for the murder of fellow deputy D.H. Dillingham. Stinson and fellow defendant Hayes Lyons walked away free men even though the court initially convicted them. The swift execution of Ives did not give the crowd time to argue for his release. The men who saw to it that Ives's sentence was promptly carried out became the nucleus of the vigilante movement that formed soon after the trial.

Led by James Williams and Paris Pfouts, the vigilantes began to secretly and systematically eliminate anyone believed to be connected with recent criminal activity. There would be no trial and no due process. Once the vigilante committee declared a man guilty, he was hunted down and hanged. The vigilantes believed that the Rattlesnake Ranch northeast of Bannack was being used as the headquarters of an organized gang that was perpetuating most of the robberies and hold-ups. They eventually caught "Red" Erastus Yaeger, the cook and barkeeper at the ranch, who told the vigilantes about the gang before they hanged him. Thomas J. Dimsdale, a newspaperman and school teacher » *continued on page 38*

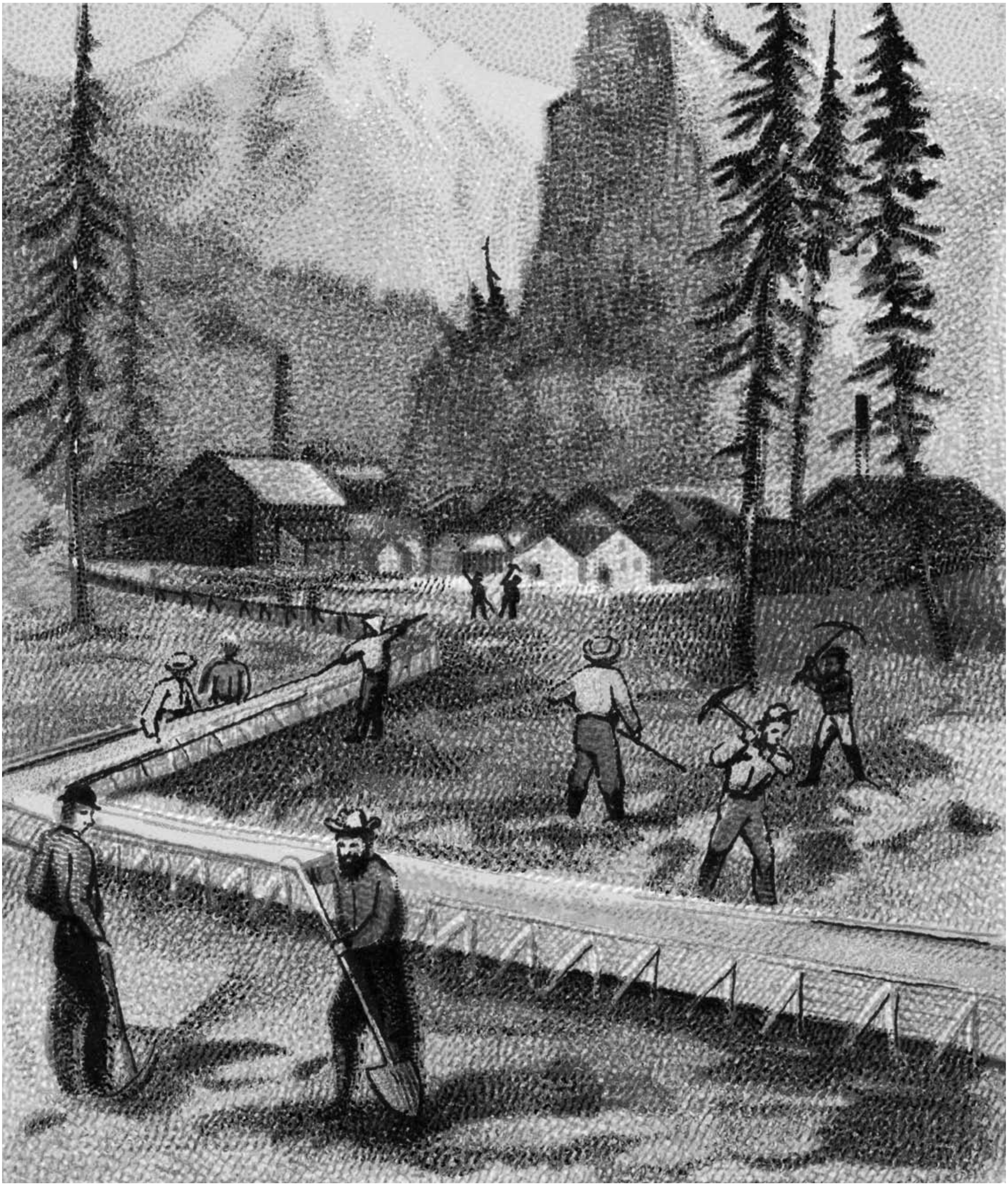
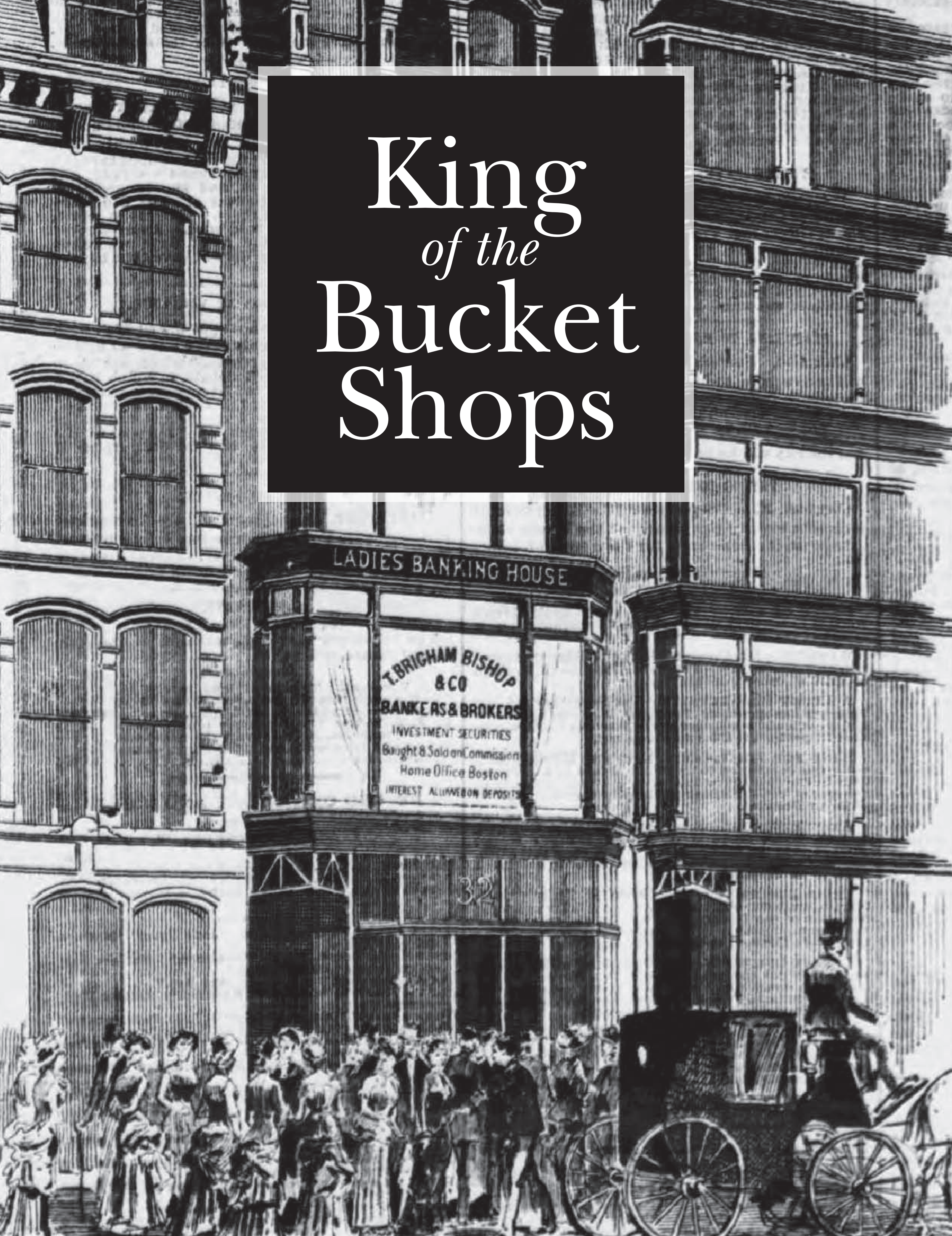


Illustration of gold mining in the Montana area, 1889.

King *of the* Bucket Shops



By Julia Bricklin

In 1885, Julia E. Hetsch was just 22 years old and the mother of two tiny daughters when she gave Thomas Bishop her life's savings. His brokerage was doing well for thousands of investors, according to the advertisements Bishop placed with her husband's printing company. "T. Brigham Bishop & Co." catered to women. Its 14th Street offices even had separate parlors for the fairer sex, with quiet, smokeless and profanity-free lounges. At any time, Mrs. Hetsch could mingle with other middle-class women and have gentlemen assist her with ticket readings.

On April 11 that year, Hetsch went to claim her account, more than $2,000. It's possible she had read in the papers about the growing number of alleged swindles associated with the firm throughout the country. Bishop refused to return her money. Shortly afterward, Bishop fled New York for Florida, but he underestimated Hetsch's rage.

Thomas Brigham Bishop was born in Wayne, ME, in 1836 to Joseph S. Bishop and Hannah Brigham, a physician's daughter. In 1860, he lived in Portland, ME, with a wife and child. A few years later, like most young men, he was drafted into the Army. Bishop paid a neighbor to take his place, but eventually ended up in Chattanooga, TN, where he started a minstrel company in 1864. He later claimed to hold various positions, including head photographer of the Army of the Cumberland, head engineer for General Garfield in Murfreesboro and commander of a company of soldiers, albeit "colored ones," a position he did not initially relish.

Although many of the highlights of Bishop's war career are rather outrageous and unsubstantiated, there is evidence to support some of his claims. There are photographs of military personnel with his name imprinted on them, and his entertainment of troops in Tennessee is well-described in contemporary newspaper accounts. Certainly, Bishop

Left: T. Brigham Bishop office building, as illustrated in the *New York Daily Graphic*, 1882.

Thomas Brigham Bishop

authored — or at least contributed mightily to — the famous Civil War ballads *Shoo Fly, Don't Bodder Me* and *When Johnny Comes Marching Home*. Julia Ward Howe allegedly borrowed the melody for *Glory, Glory Hallelujah* from his 1850s composition *John Brown's Body*.

After the war, Bishop returned to Portland and divorced his wife. In 1867, he married a glamorous actress, Sarah, whom he'd met in New York, and the couple had a son shortly afterward. Bishop resumed composing at a furious pace, churning out some 100 songs or so over the next decade. He toured Europe in the mid-1870s with his new family and, upon his return, managed successful female vocal and dramatic acts.

It is not hard to imagine why this fiercely energetic man might have entered the stock business. It was difficult to make the kind of money one might make today with hit songs, even for a prolific composer like Bishop. Copyright law was not consistent until the latter part of the century, and it was easy for publishing houses to estimate their receipts downward, or assign *noms de plumes* to songs, or buy a song outright with no royalty attachment. Bishop spent the better part of his young life traveling and singing his own songs, and fiercely guarding his titles in the press, but even the most gifted artist must slow down as age advances.

The same year Sarah and Thomas married, Edward Calahan invented the stock ticker, which allowed brokers to monitor price quotations and transactions on the exchange floor from a distance. In 1873, Thomas Edison invented the quadruplex, a system that allowed four messages to travel simultaneously over one telegraph wire. Western Union used the ticker and the quadruplex together to corner the market on real-time financial information, the demand for which was growing exponentially from post-war speculation in government-issued bonds and paper currency. Around 1880, Bishop obtained several of these, and he opened his first brokerage office at 49 Broadway in New York City.

J.K. Hetsch Printers was on William Street, about a five-minute walk from Bishop's establishment. The usual advertisement, "T. Brigham Bishop have *[sic]* opened a special Banking House for Ladies!" ran with other enticements, such as notice that small orders from anywhere would receive special attention. This was very attractive to thousands of people, who were not at all associated with the Chicago or New York Stock Exchanges, but wanted to participate in the investment fervor sweeping the country. They could place relatively small sums on the price movements of stocks and commodities, effectively "margin calling." A patron could buy or sell as few as 10 shares of stock, on margins as low as $2, representing a 2% decline or advance in the price of the stock.

What Mrs. Hetsch and many others did not realize is that the owners of unregulated stock market outlets — otherwise known as "bucket shops" — did not actually place customers' transactions on any of the stock or commodity exchanges, nor did their transactions affect the actual prices of shares or agricultural products. Often, as in the case of Bishop, the agents of a store would keep just enough money on hand to pay off the lucky few who had wagered correctly, which enticed them to come back and place even more cash or securities. This payoff was usually cash that came straight from someone else's pocket, not any returns from the stock market.

When Bishop refused to give Hetsch her deposit money back, she went back to her husband to discuss the matter. The couple returned to T. Brigham Bishop & Co. in a day or two to resolve the issue, but Bishop was gone. His brokerages in

Boston and outlying areas were shutting down, probably for two reasons: the first, a sudden rise in wheat prices that month, and second, rumors that an outside concern had purchased Bishop's business. Like the collapse of a domino train, people demanded their earnings, and Bishop's shops could not cover them, spurring even more customers to try and collect. Bishop absconded to Florida, while his wife stayed in New Jersey. Even with thousands breathing down their backs, the Bishops began plotting their next fortune, while Julia Hetsch plotted her revenge.

It is not known how much money Bishop had made personally from his northern syndicate by 1885, but *The New York Times* reported in 1887 that four similar outfits — with approximately the same number of offices and time in business — had been making annual profits of $100,000 to $500,000. When the New Haven office failed in the spring of 1885, investors found themselves out of anywhere between $25 and $5,000. Assuming each office had a conservative estimate of 100 clients at any given time, and knowing that the firm had 53 branches in different cities, it is likely Bishop's franchises collected cash closer to the $500,000 estimated by this report. Today, this would be about $12 million. This does not take into account sums that were paid back to some clients, and wages paid to chiefs of each office, but even a conservative quarter of this amount would make Bishop a wealthy man.

Bishop was able to mastermind this scheme for several reasons. After the Civil War, many states established laws giving married women "separate use" of their property; by the time bucket shops opened up in the late 1870s and early 1880s, they were able to invest money that until that time would have been under the control of their husbands. Because Bishop had offices for females only, a woman would have no fear of losing her respectability. Also, using bucket shops allowed both men and women to effectively gamble, without the moral taint of gambling, because it was perceived as a way to get some return on their hard-earned wages from the largesse of the United States' grain and stock markets.

Moreover, Bishop was particularly gifted in getting people to part with their money. A British businessman recalled how the bucket shop king tricked him out of $500. When the Brit came to interview him, Bishop rattled off names of famous clients to him, such as Vanderbilt, Gould and Sage. Then, Bishop cut himself off, and told the Londoner he should just sit awhile, and see who came in to invest with the firm. The businessman did just that. Over the next few hours, several people — actors, no doubt — came through the office, begging Bishop to allow them to do business with him. The Brit was convinced and forked over his money. He then spent the next two years chasing down non-existent dividends.

Illustration of the ladies' sitting room in Bishop's office, *New York Daily Graphic,* 1882.

Many ordinary citizens could reconcile margin trading with their moral barometers, but exchange personnel were irritated with people like Bishop for practical reasons. Bucket shops mimicked exchanges' transactions and competed with brokers for speculative customers trading on margin, thus calling into question the legitimacy of organized speculation. In November of 1877, the New York Stock Exchange formed a special committee to deal with bucket shops. It held several conferences with the Gold & Stock Telegraph Company — which rented tickers out to brokerages — and together they decided to better regulate the instruments. It's not clear how many machines T. Brigham Bishop & Co. owned or rented, but it's probable that it had at least one for every major franchise. In smaller cities, the company may have just used a black board to report downticks in prices, which almost always favored the house.

By the end of April 1885, Bishop could no longer get away with telling customers that he did not own the franchises that wouldn't pay, and he could no longer tell customers they just weren't savvy investors. Julia Hetsch filed suit in New York City, but it was too late. Bishop escaped to Ocala, FL, out of reach of New York legal authority, where he used some of his fortune to build the Silver Springs Hotel and several banks.

A tourist later recalled an encounter with Bishop there. Bishop told this fellow that he and his head building contractor were both suffering from a chronic syndrome contracted from their years in the Army, but that by drinking and bathing in the water near his hotel, they had been cured. Bishop also told this sympathetic stranger that jealous locals burned down his hotel — it actually had been lost in a fire — and he had no insurance for the structure.

Bishop did not receive insurance money for the building because he did not, in fact, own the land on which the hotel was built. He did, however, heavily furnish the hotel on credit, using his own Palatka National Bank as collateral. The bank failed soon after the fire, but Bishop had already collected insurance for the furnishings. Also, Bishop sold swampy Florida lots — many of which he did not own — to unsuspecting Northerners.

Meanwhile, Bishop's wife took on the complicated task of holding onto the cash he had made in New York. Until her teen

Ladies' banking room at T. Brigham Bishop & Co., *New York Daily Graphic,* 1882.

marriage to her first husband, she was a traveling spiritual medium, plying money from audiences wishing to speak with their dead relatives. She had purchased a considerable amount of property by the mid-1880s and continued to do so after her husband left for Florida. She acquired substantial lots of real estate in Brooklyn, Harlem and Clifton, NJ. Between 1883 and 1890, the titles to these properties circulated between her, her son William, Brigham's brother George in Massachusetts and son Clarence.

While Mrs. Bishop amassed property, Mrs. Hetsch watched T. Brigham Bishop & Co. very carefully. She hired Pinkerton detectives to investigate Bishop's family and cronies, and may have discovered after a time that his stepson had purchased the company's assets under the moniker "United Exchange Company." When Wall Street businessmen came into Hetsch's husband's shop to print bills and advertisements, she would ask them what the latest rumors about Bishop were.

In 1888, Bishop slipped back up north. He loved betting on horses, and bragging about his winnings, so it did not take long for Hetsch's detectives to find him. Officers followed him everywhere, but Sarah Bishop always handled her husband's business transactions in New York City, while he remained safely across state lines in Clifton.

In July of 1890, Mrs. Hetsch's investigators sent a banking imposter to meet with Bishop in New Jersey. This man led Bishop to believe that a large sum of money was at his disposal, in New York, for one of his schemes. The trap worked. When Bishop arrived in the city, he was met by the sheriff. He was unable to furnish bail, so he was put in Ludlow Street prison. Sarah Bishop arrived shortly afterwards, with a friend. They put up collateral for his $2,500 bail, which Hetsch's lawyer declared fraudulent, but the sheriff let him go. Bishop immediately went back to New Jersey and hid.

In November of 1891, Bishop was again induced to come to a rendezvous spot with the promise of a business opportunity. New Jersey police promptly arrested him for skipping bail in New York and placed him in Ludlow Street jail again. George Matthias, the "friend" who put up bond the previous year, was angry that Bishop had left town before trial, so he was forced to turn himself in. Furthermore, he said, Mrs. Bishop's lawyer had promised to pay him to go on bond, and had not. Matthias explained to the judge that Bishop was not penniless, as he claimed, but that the couple was tremendously wealthy, and had put all of their money and real estate in Sarah's name.

Mrs. Hetsch's lawyer wasted no time opening an examination of Mrs. Bishop's finances. On December 9, 1891, a city referee grilled Sarah. She finally admitted to owning parcels and homes in several states, but insisted they were all purchased before she married Bishop. She also pleaded ignorance with regard to her husband's dealings, and said that she only knew what his business was because of the sign on the window of his office.

Sarah's acting skills were not convincing enough. Bishop spent the next two months in jail, until Sarah could muster enough cash to get him out. As soon as he was freed in February 1892, Bishop filed suit against the Hetsches for perjury, claiming their false accusations had made his life miserable. In April, however, the city court put in a judgment of $2,971 for Mrs. Hetsch, and the latter immediately countersued Bishop for the "trumped up" perjury charge. Threatened with more jail time, Bishop dropped the suit.

It is not clear if Mrs. Hetsch ever received her settlement, but the publicity surrounding her endeavors forced the Bishops to move around from hotel to hotel and state to state for years. In 1900, Bishop reemerged in Philadelphia, using "Thomas B. Bishop" as his moniker, but failed to get any investors in his new wireless company. $

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The Fall and Rise of Independent Research

By Gregory DL Morris and Tara Driscoll

There are three teams active at any sporting event: the two competing sides and the officials. Perceived good and bad calls are greeted with boos or cheers, but no one ever actually roots for the refs per se. Still, everyone acknowledges their importance; the game could not be played without their presence. And so it is with the three teams in investing: buyers, sellers and research.

As with the presence of officials, or judges, for that matter, no one would debate their importance. For many decades independent research was the fundamental advantage of any good investor. Early in his career the great investment advisor Benjamin Graham would travel from his offices in New York to Washington, DC, to examine company regulatory filings that were technically public records, but in those days were not available.

But in another, more fraught analogy to sports officials, research is not supposed to take sides, just call offsides or interference or unsportsman-like conduct. History clearly shows that has not always been the case.

Important lessons can be learned from the past three decades, where some notable firms incurred fraud charges while trying to benefit financially, regardless of the investors' success. The case of former equity research analyst Henry Blodget is one example. From Oppenheimer to Merrill Lynch, Blodget operated on his own terms. Amid personal investments in tech stocks, Blodget is considered by many to have betrayed investors for his benefit and is today banned from the securities field for lying in his stock analyses. The research for stock investments requires trust on the part of the investor to believe that revenue and earnings figures are correct, and that the investor will not be deceived.

The complication, says Jack Ablin, Chief Investment Officer for BMO Private Bank (formerly Harris Private Bank, in Chicago), is whether research is considered a service to clients or a business. Neither is a safe designation — if a service there is a temptation to give the clients what they want; if a business, the drive for profit can cloud the picture.

After the exposés and scandals of recent decades, independent research seemed to fall out of favor. Many investment banks and brokerages reduced the size of their research operations, or eliminated them entirely. In some cases the logic was that most investors — retail or institutional — did their own screening online. Now, however, that trend seems to be reversing.

Important lessons can be learned from the past three decades, where some notable firms incurred fraud charges while trying to benefit financially, regardless of the investors' success.

"We see a few more 'sell' recommendations these days than in recent years," says Ablin, "but most recommendations still skew to the 'buy' side." The driver, Ablin suggests, is the revenue model not in research itself, but overall. "Investment banks have come full circle on research. The bulk of their revenues used to come from initial public offerings, so the urge was to support that. Now that area has died down a bit, and the growth business is more advisory, especially for hedge funds."

Those are not necessarily "buy-and-hold" investors, Ablin explains, but rather investors who work both long and short. The result is that sell recommendations are just as useful as investing guides as are buy ratings.

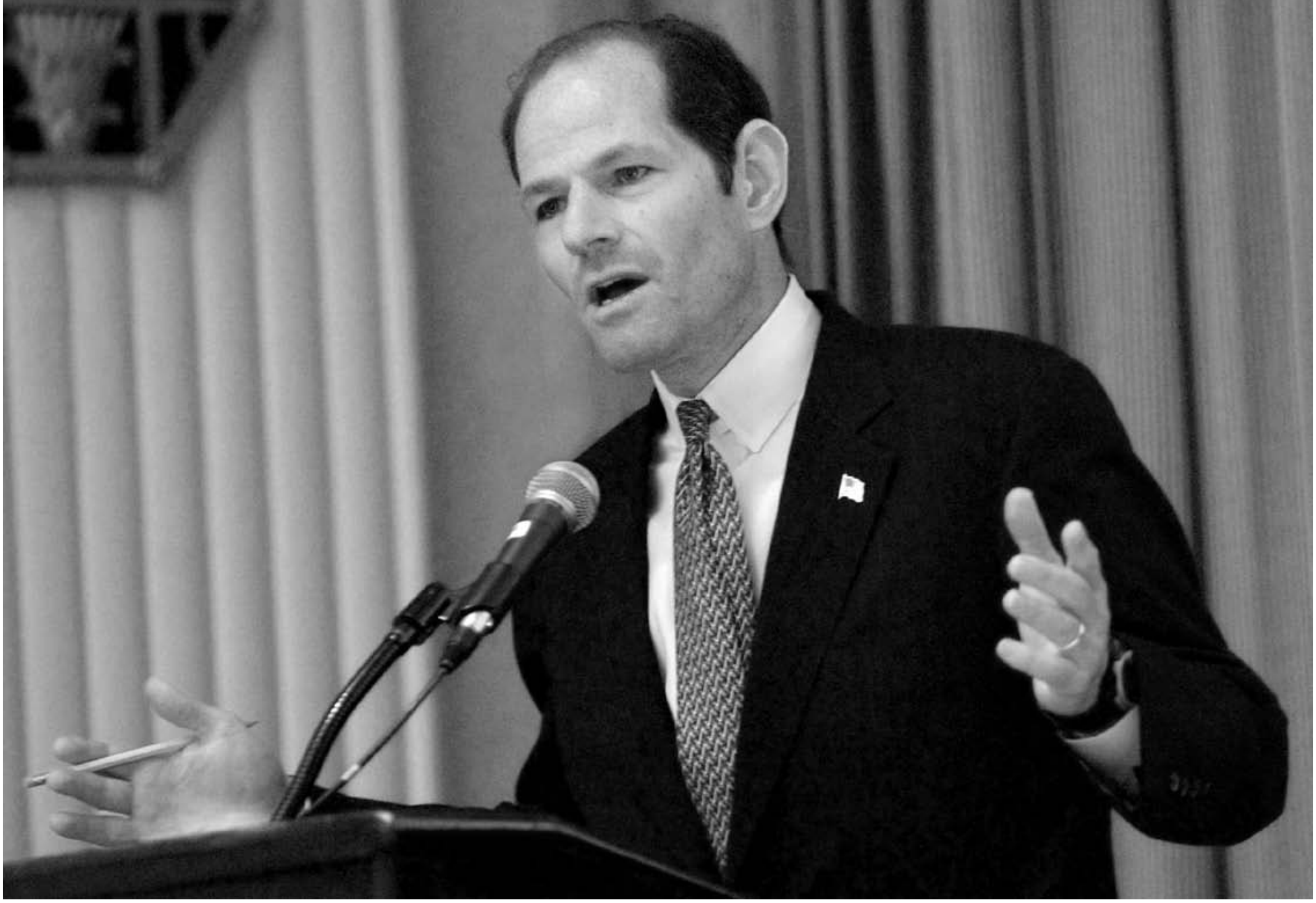
That new reality is in stark contrast to recent decades. In the 1980s and 1990s, as research became more of a commodity, independent research flourished under firms like Donaldson, Lufkin and Jenrette. DLJ (later acquired by Credit Suisse, then Bank of America) recognized the value of research and provided a service in a niche that Wall Street lacked. Today, such research has become an integral part of the sell-side. Yet international regulations around issuing commissions have caused many firms to offer both external and internal research options. Commissions are to be paid independent of trade performance.

As a result, Goldman Sachs introduced its Hudson Street Services, which provides information from external research and offers access to the resources of a small number of external research houses. Credit Suisse's ResearchExchange also responded with its commission model, guiding buyers to independent research. In turn, Merrill Lynch announced a select distribution contract with Global Media Intelligence, an independent research provider.

Then, just recently, Goldman backed away from Hudson Street. A Reuters report notes that Hudson Street's demise is the latest sign of the challenges smaller research houses face to prosper in a market where everyone from the big Wall Street banks to major mutual fund firms are seeking to cut costs. Another theory about the decline of independent research is that it also signifies the idea that major investors may no longer be prepared to pay for an objective opinion about the markets.

In 2003, independent research on Wall Street increased as a result of a $1.4 billion settlement between Wall Street banks and regulators led by then-New York Attorney General Eliot Spitzer concerning allegedly tainted research.

Sanford Bragg, Chief Executive of Integrity Research Associates, which tracks the independent research industry, recently told Reuters, "It was like a big gold rush when everybody wanted to be an independent research provider. But all the



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New York Attorney General Eliot Spitzer addresses an investment conference in Manhattan, on April 13, 2005. Frequent topics revolved around independent research and the resolution of lawsuits brought by Spitzer to eliminate conflicts of interest by Wall Street firms.

hoopla around independent research in 2003–2004 has died down."

The settlement followed accusations by Spitzer and other regulators that securities analysts at some major banks were working for companies' shares, instead of giving what they claimed to be "objective advice." Often investors received larger bonuses if high ratings, or help on sales calls, allowed a bank to gain investment banking business.

The agreement required a dozen banks to spend $460 million to provide clients with independent research for a five-year period that ended in 2009 for most banks. But as the requirement dissipated, independent firms had to rely on less revenue.

Still, there are signs that independent research is on the rise in some respects. Ablin notes that "as a result of the cost purges, a lot of researchers set up boutiques, and a lot of firms like ours are disengaging research from execution. That all serves us well."

According to Millennium Asset Management, incentive for investors and money managers lies in the daunting flood of information they face. In addition, research companies gain considerably more investor interests, liquidity expands and the gap between the bid and offer price narrows so the shares become more palatable for buyers. And, absent research, shares can be expected to trade 32% lower than if they had even one analyst following; and the spread in the price would narrow by 50%.

But some Wall Street firms have a long way to go. According to a study conducted by Equity Development research firm, at least 4,000 publicly-traded companies have no discernible analyst coverage, and about 25% of stocks traded on the NYSE have no coverage. According to Integrity Research, alternative research is expected to increase to nearly $3 billion. That figure could go even higher as more sell-side firms develop independent research platforms, and given the increase of commission sharing.

While Goldman Sachs contends that it created Hudson Street because of industry trends sparked by the settlement, they say customers simply didn't want to buy in. And Spitzer suggested there be no fees for such services. He told Reuters that, like the free enterprise Internet, "People want the content, but they don't want to pay for it."

According to Investopedia, many institutional and hedge fund investors rarely get their ideas from Wall Street research coverage, so the need for outside research is optimal. Investors and money managers seek a return to the fundamentals of analysis and proprietary studies and want independent, unbiased, untainted research — proprietary information. Data from Investars, an independent service tracking performance of analysts' stock picks, shows that stock picks by six of the better-known independent research firms, on average, have outperformed a half-dozen Wall Street firms over the last five years.

The most important long-term trend in independent research may come from an important and equally independent area: retail advisors. Once in the shadow of the wirehouses and even some big

bank-based brokerages, the independent advisors need to provide research to their clients, but also need to spend their time and energy on individual financial planning. As a result, the firms that support independent advisors are expanding their research operations.

One prime example is AIG Advisor Group, where Kevin Keefe is Executive Vice President of Wealth Management. "We see a world with fewer financial advisors today than yesterday, and a lot fewer than five years ago. At the same time that the pool of advisors is growing smaller, the demands from clients is greater. About 60,000 Baby Boomers are retiring every day, and they need guidance for more complex needs than most investors had in the past."

One of those needs, of course, is investment performance, but based on AIG's customer surveys, "a lot of things rank higher than financial performance in determining why investors go to advisors in the first place, and why they leave one and go to another. Qualities that rank highest are understanding clients' real needs and their risk tolerance, and helping them achieve their aspirations. We hold 250 due diligence meetings a year with fund managers," says Keefe. "That allows us to go beyond the data. We always start with quantitative analysis, all the normal screening processes, but then we also figure in expenses, fees, manager tenure and other qualitative factors so that we can see risk-adjusted returns, not just absolute returns."

Keefe uses the model of advisor as general contractor. The advisor works directly with the client and manages the project. "But advisors have much more important things to do than try to determine which is the next best large-cap value fund. That is where we come in. When I started here we had three people in research, two doing due diligence."

Now his research investment team has nine full-time staff who provide objective evaluations in 24 asset classes. When Keefe began rebuilding the research team, there were just 12 asset categories and about 40 funds listed. Today, he says, there are 24 categories and more than 100 funds. Beyond those recommendations, the team puts together white papers, conference calls and provides commentary on fund families.

"The world is not getting any less complicated, or more transparent," says Keefe. "Investments are not getting any less complicated either, but investors are getting more sophisticated."

That is true at the retail, as well as institutional, level. Those trends seem to bode well for research continuing to gain status and stature. Perhaps it just took a few games with the replacement refs for investors to appreciate the professionals. $

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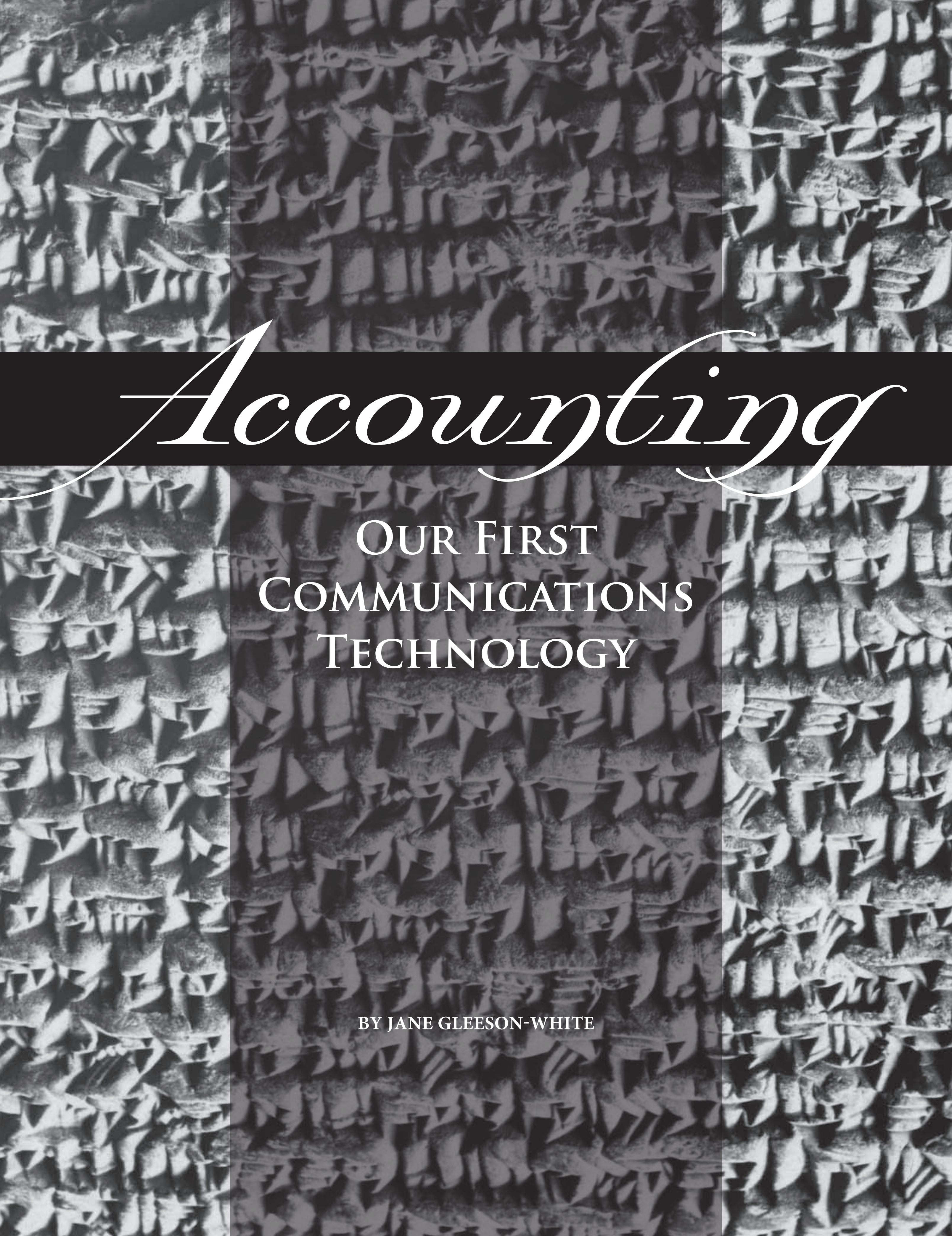

Accounting

Our First Communications Technology

By Jane Gleeson-White

Our urge to account — to measure and record our wealth — is one of the oldest human impulses. We were accounting before we could use abstract numbers; we were accounting before we could write. In fact, it now appears that writing, one of the greatest human accomplishments, was invented by accountants. In 1969, the French archaeologist Denise Schmandt-Besserat began a research project that would take her more than two decades to complete and yield some staggering results. For 25 years she visited museums in the Near East, Europe and North America, examining thousands of artifacts which lay buried in their storerooms. Among figurines, pots and mud bricks, she found fired clay tokens shaped as cones, spheres, ovoids and cylinders. Their purpose had eluded archaeologists and anthropologists for centuries.

As she grouped the tokens together, Schmandt-Besserat began to realize she had at her fingertips the remains of an ancient accounting system. The earliest tokens date back to around 7000 BC, when settled farming communities first appeared in Mesopotamia (now Iraq) and people began to keep track of their produce and exchanges. Schmandt-Besserat found that each shape represented a different thing: a cone was a small measure of grain, a sphere was a large measure of grain and a cylinder was an animal. This simple token accounting method was our first symbol system created solely for communicating; it was our first visual code and the first technology invented for storing memory.

When cities emerged in around 3500 to 3100 BC, the tokens suddenly changed and a complex accounting system emerged. Now there were 300 token shapes to record a wide range of goods, including bread, honey, textiles and metal; and the proto-accountants began to store their tokens in hollow clay balls, or "envelopes," imprinted with the signature seals of the parties involved in the exchange. According to accounting historian Richard Mattessich, the invention of clay tokens and envelopes — the sealed transfer of tokens between trade partners — was the origin of our modern accounting system.

Interpreting Mesopotamian accounting in today's terms, Mattessich suggested that the total sum of tokens inside a clay envelope recorded an individual's assets, and therefore that putting a token into an envelope increased the owner's assets (or wealth) and was, by definition, the equivalent of a debit entry. Taking a token out of an envelope reduced the owner's assets and was thus the same as a credit entry.

The ancient accountants then began to press the tokens into the wet clay of the envelope, recording on its surface the number and sort of tokens it contained — and in the process took the first steps towards inventing writing. But the most significant advance occurred in around 3300 BC, when the record-keepers transformed the token-and-sealed-envelope system into something utterly new: they flattened out the clay balls and pressed the tokens into their flat surface — thus creating the world's first clay tablets.

DAY-BOOKS LAST FOR A MONTH, LEDGERS FOREVER… DAY-BOOKS EMBRACE THE MEMORY OF A MOMENT, LEDGERS ATTEST THE GOOD FAITH AND CONSCIENTIOUSNESS WHICH ENSURE A MAN'S REPUTATION FOR ALL TIME.

Cicero

The last step in the invention of writing was taken when the ancient traders realized they could simply draw the tokens' shapes on the tablets with a stylus, thus bypassing the tokens altogether; in other words, the 3-D tokens could be represented by 2-D symbols. And so spheres became circles, cones became triangles, ovoids became ovals and writing was invented. Writing remained the exclusive domain of account keepers until about 2000 BC, when it began to be used in funerary rituals to commemorate the dead, and was subsequently taken up by a range of word-mongers, including law-makers, priests, historians and storytellers.

Apart from its role in the invention of writing, accounting is significant for human civilization because it affects the way we see the world and shapes our beliefs. To take this early example, the invention of token accounting in Mesopotamia was important not only because it facilitated economic exchanges and generated writing, but, according to Mattessich, "because it encouraged people to see the world around them in terms of quantifiable outcomes." For the first time we had tools which allowed us to count and measure — to quantify — the world around us and to record our findings.

Record-keeping and accountability reached new levels of sophistication in wealthy classical Greece and Rome. The Parthenon or Elgin Marbles from the fifth century BC contain accounting records, including the disbursements of the treasures of Athena, the ruling goddess of the city. The business dealings of all Athenian public officials were recorded, carved into stone and publicly displayed in Athens so its citizens could oversee the spending of state finances. Likewise, all Athenian citizens were required to keep regular accounts of their own financial affairs. If they failed to do so, they were severely punished by being forbidden to travel from the city, consecrate their property to a god, dedicate a sacred offering or make a will. Accountability and freedom of financial information were considered essential for running the world's first democracy.

The celebrated Roman orator Cicero launched his career in the law courts with prosecutions that rested on the evidence of accounting records, which were important legal documents in ancient Rome. The head of every Roman family was required to keep domestic accounts. In 77 BC, Cicero used the evidence of a client's well-kept ledger to argue in court for his good character and trustworthiness, saying, "day-books last for a month, ledgers forever…day-books embrace the memory of a moment, ledgers attest the good faith and conscientiousness which ensure a man's reputation for all time."

The records of the most important account book of the Roman businessman (the *tabulae rationum*) were divided into two pages. The Roman naturalist Pliny the Elder was much taken with this division, which meant that two sides comprised the whole. In 70 AD he wrote,"On one page all the disbursements are entered, on the other page all the receipts; both pages constitute a whole for each operation of every man." Here, perhaps, are the rudiments

of double-entry bookkeeping, which was to emerge in northern Italy some 1,200 years later.

One of the most important documents of the very few which survive in Europe from the years between the fall of Rome in the fifth century and the Crusades is an accounting record called the *Capitulare de Villis*. Dating from 800 AD, it is a list of instructions for the management of royal estates initiated by Charlemagne, King of the Franks, or his son Louis. It instructs each estate manager to "make an annual statement of all our income, from the oxen which our ploughmen keep, from the holdings which owe ploughing services, from the pigs, from the rents, judgement-fees and fines, from the fines for taking game in our forests without our permission." The list covers accounts for the entire enterprise of a feudal lord, from small details to the business of battle. The annual income statement of the lord's estates was presented to him each Christmas, "so that we may know the character and amount of our income from the various sources."

Three hundred years after Charlemagne's accounting standards were formulated, feudal Europe was rocked to its foundations by an economic boom ignited by the Crusades — a series of mass movements ostensibly far from the concerns of commerce. In 1095, following an appeal from the Byzantine emperor for help against the Turks, Pope Urban II called all of Christendom to war against the infidel. The secular side effects of the Crusades catapulted Europe into a new epoch, opening it to the east as never before and reviving its stagnant economy. As historian A.C. Littleton put it, "That Jerusalem was won and lost and won again mattered less to civilization, as it proved, than did the incidental results which formed no part of the original intention." These incidental results appeared first in the city-republics of northern Italy — trading centers which used their wealth or strategic position to free themselves from the rule of local aristocrats and the Church.

Pisa was the first to gain its freedom, granted independence from its local lord by the Pope in 1081. Venice was next. In 1082, the Byzantine emperor's Golden Bull guaranteed Venetian merchants tax-free travel throughout the Byzantine empire west of Constantinople, in return for Venice's assistance with his battles against the Normans. The emperor's Golden Bull

Engraving of Cosimo de Medici, member of the Italian international merchant banking family.

proved golden indeed: 13 years after it was granted, the first Crusade reopened the eastern Mediterranean — and the merchants of Venice found themselves kings of a lucrative trade empire which spread to Greenland in the north and east to Peking.

One of the new breed of Italian merchant travellers was the legendary Venetian Marco Polo, who in 1271 traveled with his father and uncle across the Gobi Desert to the court of the Mongol emperor Kublai Khan. Another widely-traveled Italian merchant of the 13th century was Leonardo da Pisa, better known today as Fibonacci, who grew up on the coast of Barbary (now Algeria), where his father worked at the Pisan customs house.

The young Fibonacci spent his days in the local bazaars, where he was captivated by the extraordinary system of writing numbers the Arab merchants used to conduct their business. The numerals used by the Arabs in bazaars across the Mediterranean could be applied to computations Fibonacci had never seen before, such as addition, subtraction and multiplication. This simple Arabic arithmetic we use today was mostly unknown in Europe at the time. Instead, those Europeans who could write used Roman numerals to record numbers and a counting board, or abacus, to add and subtract.

The Arab merchants had learned their number system in India by the ninth century and had been using it for centuries to calculate interest, convert currencies and solve other problems of trade. Fibonacci brought these Hindu–Arabic numerals to Italy where he wrote several books about them in Latin and became a celebrated mathematician.

The earliest known surviving Italian account is a fragment from the ledger of a Florentine bank dated 1211. It records the debtors and creditors of a customer from Bologna and shows in embryo the features of a modern ledger, except that it uses Roman numerals to record money amounts which would have been calculated with an abacus.

Most accounting historians agree that the first surviving accounts kept in double entry date to around 1300: the accounts of the Florentine merchants Rinieri Fini & Brothers (1296–1305) and those of Giovanni Farolfi & Co. (1299–1300). The Farolfi ledger displays the six essential features of double-entry bookkeeping as outlined by accounting historian G.A. Lee: first, the idea of a proprietor or business partnership as an accounting entity whose books record its financial relationships with others. Second, its entries are made in a single monetary unit so they can be added together. Third, it relates the following oppositions: increases and decreases in physical holdings of cash or goods; increases and decreases in debts by or to other individuals or entities; and increases and decreases in the business's own assets and liabilities. Fourth, owner's equity is shown as the sum of assets and liabilities. Fifth, profit is understood to be the net increase in the owner's equity (and loss the net decrease). Sixth, the profit or loss is measured over a clearly-defined accounting period.

The appearance of these first double-entry accounts in Italy so soon after the arrival of Hindu–Arabic numerals is provocative, and provides an alternative to the common explanation for the emergence of double-entry bookkeeping in Europe around 1300, which is that it was the result of a phenomenal expansion in commercial activity, particularly in 13th-century Florence. This explanation is persuasive: that with their unprecedented concentrations of capital raised through their unique system of commercial partnerships built on family alliances, their many partners who each required their individual capital contribution and responsibilities to be recorded, and their vast credit networks which spanned Europe, the successful merchant bankers of Florence would have been forced to devise systematic new methods of bookkeeping. And so, the

story goes, the Florentine record-keepers developed a style of account-keeping which allowed them to classify, record and cross-check their accounts — and, most importantly, to calculate their profits, which allowed them to see not just what they owned but also how well their business was doing. This new form of business recording was double-entry bookkeeping.

It is also possible, however, that the new mathematics and double-entry bookkeeping evolved together in Asia as part of a coherent commercial system developed by the Hindus or Arabs, or both. Research into the possible Islamic or Hindu origins of double-entry bookkeeping has found suggestive, but not conclusive, evidence. Some researchers have traced the new bookkeeping to Fibonacci and to the Islamic universities of Muslim Spain. Others argue that accounting practices in the early Islamic State were similar to those later used in northern Italy and may have been their source. But it is also possible that Indian merchants originally developed the art.

In the 18th century the British traveller Alexander Hamilton[1] wrote: "We would remark that the *Banias* [traders] of India have been, from time immemorial, in possession of the method of book-keeping by double-entry" and noted that in the Middle Ages Venice was "the emporium of Indian commerce" — implying that Venice was the gateway through which double entry reached Italy from India. Although there is very little surviving documentary evidence of ancient Indian commercial practice, it seems that this Indian double-entry system — known there as *bahi-khata* — was used by its merchants for possibly thousands of years.

The new style of bookkeeping was just one of several technical innovations that appeared in Europe in the 13th and 14th centuries which emphasised precision, mathematics and the quantification of physical phenomena. Among these inventions were spectacles to correct eyesight, written marine charts for navigation, the first frescoes painted using artificial perspective and the first European clocks.

This enthusiasm for measuring was fuelled by a burgeoning new class — the merchants. The increasing influence of merchants in medieval and early Renaissance Europe gave birth to a civilization in which for the first time people could satisfy their needs "only by buying the services of and granting privileges to those who lived by counting."[2] One of these new counting men was Francesco Datini, a merchant from Prato, near Florence, a cloth manufacturer and dealer in armour, wool, wheat and slaves. On his death in 1410 — without legitimate children — Datini bequeathed to Prato not only his fortune of 70,000 gold florins but also 500 account books, 300 deeds of partnership, 400 insurance policies, bills of exchange, checks and some 150,000 letters.

At the height of his business life, Datini exchanged 10,000 letters a year — with his wife, his friends, his trading houses and his agents throughout the Mediterranean and across Europe. Two themes preoccupied Datini's restless mind and infuse his many letters: religion and business. And he invoked both in the opening dedication of every ledger he used: "In the name of God and of profit."

Datini's meticulously kept account books span almost 50 years and clearly show the transition from single- to double-entry bookkeeping. His surviving ledgers from 1367 to 1372 do not use the double-entry system, while those from 1390 onwards do. Datini was innovative not just in his early adoption of the new style of bookkeeping; when in 1398 he and a partner opened a bank in Florence, they accepted a new form of payment only just coming into use in Europe: checks. Like many business practices new to medieval Europe, the check had long been used by Arab merchants — as early as the ninth century a Muslim merchant could cash a check in China drawn on his bank in Baghdad.

Datini was one of the new breed of Italian international merchant bankers who in the 14th century created vast trading empires and networks of credit from London to Constantinople. In the next century these Italian international merchant bankers, most notably the Medici of Florence, would use their immense wealth to commission works of architecture, art and scholarship — and effectively finance the Renaissance. Datini stood on the threshold of this new age, a man ahead of his time. For in Datini's day the restrictive, secretive guild system of medieval Europe still ruled trade and commerce. Early double-entry accounts such as Datini's were kept not with the new Hindu–Arabic numerals but in the old, inoperable Roman numerals; only by the end of the 15th century did Hindu–Arabic numerals begin to appear in accounting records.

Despite their greater efficiency and versatility, the new numerals took 300 years to be accepted in Italy. Their use was discouraged and often outlawed by the guilds and other power players such as the Church, who believed that Roman numerals were superior and tamper-proof, and the scandalous new eastern numerals easy to alter and falsify. In 1299, the Florentine Arte di Cambio (Guild of Money Changers) banned the use of Hindu–Arabic numbers. The Medici bank did not use Hindu–Arabic numerals exclusively until about 1500, and the last Italian book of arithmetic in Roman numerals was published as late as 1514. Elsewhere in Europe the adoption of Hindu–Arabic numerals was even slower: in 1520 the German municipality of Freiburg refused to accept accounts as legal proof of debt unless they were made in Roman numerals or written out in words; and Roman numerals were still used in Scotland in the 17th century.

However, the use of Hindu–Arabic numerals *was* advocated by the man who in 1494 codified the state-of-the-art bookkeeping practices of Venice, Luca Bartolomeo de Pacioli. By the 1430s the merchants of Venice had perfected a system of double-entry account keeping in two columns, which became known as bookkeeping *el modo de vinegia* or *alla viniziana:* the Venetian method. It is this Venetian method that, through its extraordinary resilience and mutability, has come down to us today, transformed over several centuries from a rudimentary business tool into an efficient calculating machine. **$**

Jane Gleeson-White holds degrees in economics and accounting and is studying for her Ph.D. in creative writing and literature. She has worked at the Peggy Guggenheim Museum in Venice and currently lives in Sydney, Australia. This excerpt comes from her book, Double Entry: How the Merchants of Venice Created Modern Finance, *published by W.W. Norton & Company.*

Notes

1. This Alexander Hamilton is not to be confused with the first US Secretary of the Treasury with the same name.
2. Swetz, Frank J. *Capitalism and Arithmetic: The New Math of the Fifteenth Century,* 1987.

James Ling *and the* Craft of Financial Alchemy

By Steven Mark Adelson

Alchemy is the medieval study of transmutation, with the primary goal of unlocking the secret of turning lead into gold. Although no one ever discovered this panacea — creating something of value from something without value — one person did accomplish its financial equivalent by pioneering the leveraged buyout, formulating derivatives and developing a unique approach to redeploying the assets of acquired companies to unlock hidden value.

Starting with only $3,000 in capital and three employees to form an electrical contracting firm, in just over 20 years James Joseph Ling built the nation's 14th-largest industrial company — a conglomerate known as LTV. At its height in 1968, LTV employed 29,000 workers and manufactured 15,000 separate items for military, industrial, commercial and consumer use. The company was valued at $3.75 billion with a share price of $180, and the founder was worth in excess of $100 million.

Two years later the stock was trading below $10. What happened?

When he first started out, Ling was not anyone's idea of an empire builder, nor a corporate executive. Yet this high school drop-out became a master of corporate finance to such a sophisticated degree that scores of insurance companies, mutual funds, banks, brokerage houses and other institutional investors hailed him for his acumen.

Born in 1922 in Hugo, OK, Ling was an excellent student and had completed his high school curriculum by the time he was 14, but he was not allowed to graduate early. So he quit school and ran away from home, spending the next several years at dead-end jobs around the country.

When he was 19, Ling wound up in Dallas, TX, and for four years worked odd jobs to support himself until he became an apprentice electrician with a local contractor. He became a journeyman electrician in six months.[1]

By 1944 he enlisted in the Navy, was sent to electrical school and became an electronics technician. From there he went to the Philippines, where he spent the war stringing, installing and maintaining heavy power equipment while studying electrical engineering at night through a correspondence course.

Discharged in 1946 with a rating as master electrician, Ling decided to start his own electrical contracting company, Ling Electric, in Dallas. His start-up capital of $3,000 came from the sale of his home, which he spent on a used truck, as well as surplus military tools and wire. His only other asset was his driving ambition.

1947: $70,000

Post-World War II was an excellent time to be in this business. As the nation experienced a housing construction boom, Ling Electric won contracts to install the wiring for lighting fixtures in homes around Dallas. However, contracts for such work were done on a house-by-house basis, and they only net a few hundred dollars each. Over the years, Ling's company became a sub-contractor to construction firms specializing in large scale projects, like industrial and commercial buildings, as well as government installations. Soon he was winning bids on his own for hospitals, office buildings and buildings on an Air Force base.

1955: $1.5 Million

Although Ling's company was thriving, his personal finances did not reflect his success. Ling Electric was a sole proprietorship, and that meant his tax rate was gouging him at the personal level, which left little cash for the expansion plans he was devising. To alleviate this problem he decided to incorporate, as corporate rates are lower than personal rates and corporations have more opportunities for acquiring funds for expansion by selling stock, bonds and a variety of commercial paper.

Ling applied for an initial public offering (IPO) and received authorization to sell 800,000 shares on the local over-the-counter stock exchange at $2.25 per share. He kept 400,000 shares for himself and sold the remainder over the next 90 days through door-to-door and telephone solicitation. After commissions, Ling Electric, Inc. had working capital of $738,000. On paper, James Ling was worth $900,000 (slightly less than $10 million today).

Ling doubled the size of his company by buying another electrical contracting firm, but the per-share value of the stock remained flat. The reason: The investment community was more interested in corporations engaged in the growing field of manufacturing electronics with industrial and military applications because of their lucrative, long-term contracts.

So Ling devised plans to enter this field. From that point on, Ling initiated a series of maneuvers designed to shift away from electrical wiring as his primary source of revenue and into the growing field of manufacturing electronics with industrial and military applications.

In 1956, Ling Electric made its first foray into the electronics field by buying L.M. Electronics, a California firm that manufactured electronic vibration detector equipment used by aircraft and missile manufacturers for testing their parts and sub-assemblies for resistance to the stresses of vibration. Ling Electric acquired control of L.M. Electronics for nearly $200,000, as follows:

$27,500 cash

$50,000 working capital

$60,000 assumption of debt

$60,000 stock

L.M. Electronics then became Ling Electronics, a subsidiary of Ling Electric. This marked the first time James Ling used stock (and later commercial paper) to acquire a company.

1958: $7 Million

Because of the launch of *Sputnik* by the USSR in October of the previous year, demand for military electronics equipment skyrocketed. Ling's diametric shift into electronics was well-timed.

Previously, Ling Electronics had purchased a small fabricator, Electronic Wire & Cable, for cash and then made a public offering of Ling Electronics, raising $1.3 million in stock. After this, Ling renamed the firm Ling Industries, Inc., and a new subsidiary was created called Ling Electric, which held the stock of the original electrical wiring firm. For $100,000 in cash and stock, the company acquired American Microwave and merged it with Electronic Wire & Cable to create Ling Systems as a subsidiary of Ling Electronics.

In 1958, he acquired another manufacturer of electronic testing equipment, Calidyne, for $320,000 in cash and $922,000 in six-month convertible debentures.

By then, Ling realized that although sales to the military could be lucrative, revenues could be erratic from year-to-year. With Ling Electronics selling for nearly $15 per share, Ling engaged in his first major stock-swap deal designed to balance his military sales with those in the civilian market. Ling Electronics acquired University Loudspeaking and Altec Companies, a manufacturer of professional quality audio equipment, for $2.3 million in cash, the money secured through short-term notes. Ling Electronics then became Ling-Altec.

1959: $48 Million

Ling's next merger was with Continental Electronics, a prime systems contractor that designed and manufactured specialized high-powered radio transmitters for the military and the Voice of America, for $3.25 million in cash, $125,000 in short-term notes and 10,000 common shares. Several months after the merger, Continental won a $50 million Navy contract to develop and build a very low-frequency radio station for communicating with submerged Polaris submarines.

For Ling this meant increasing earnings per share, which can be accomplished in one of two ways. Either:

1. Generate higher earnings with the same amount of shares outstanding, through improved operations and the acquisition of companies with good earnings, or

Museum of American Finance

100 shares in Ling-Temco-Vought, Inc., 1971.

Museum of American Finance

LTV stock certificate, 1971.

2. Maintain earnings while shrinking the number of shares, thus enlargement of per share profits, which would boost the price of the common stock. The best way to achieve this is by breaking out existing holdings or major divisions, and spinning them off as independent companies by exchanging part of their capitalization for common stock; the result is lower capitalization for the parent company with partial ownership of subsidiaries, which now are traded on their own. This scheme allows for the advantages of combining diversification with restructuring.

As phenomenal as his expansion had been over the last two years (a 12-fold increase in sales with earnings rising by more than 600%), Ling-Altec now had nearly twice as many shares outstanding (1.6 million), and long- and short-term obligations elevated to about $8 million (over $80 million today). This was a great deal of money for a company this size, but if need be, long-term debt could always be converted into assets by exchanging debt for stock; short-term notes had to be paid off.

Ling solved his debt problem by first issuing 10-year debentures through an investment banking firm and then syndicating a $5 million, 15-year loan of convertible debentures at 6% through a private placement with the Mutual Life Insurance Company of New York. The investors also received stock warrants and securities that gave them the right to buy 50,000 shares of Ling-Altec stock from the company for $33 a share any time during the next 10 years.

These two deals were tied together by making the debentures convertible into Ling-Altec Electronics common stock (since the debentures could be converted into stock, the interest rate was lower because the risk was lower) and attaching stock warrants to the loan. As long as no one exercised the warrants or conversion, equity in Ling-Altec Electronics would not be diluted. Of course, long-term debt still existed on the books, but Ling was confident this would be serviced through the earnings of companies to be acquired later.

And this was how Ling formulated his basic strategy to build a major electronics enterprise through acquisition via leveraging debt financing rather than through cash flow:

- Use cash-on-hand and, as required, additional cash through either the issuance of additional short-term notes or using stock as collateral for a loan;
- Offer an exchange of stock on notes, warrants or debentures to sweeten the deal if necessary;
- Use the earnings from the acquired company to pay the interest;
- Issue longer-term obligations, using the cash from this offering to wipe the balance sheet clean.

In other words, buy a company with cash and short-term paper, and based on

the transaction sell longer-term obligations to delay payments. Although utilizing borrowings to make large acquisitions also enlarges your debt, the interest charges could be serviced by the enlarged cash flow.

1960: $150 Million

Ling realized that many new developments in electronics would involve aircraft and aerospace because miniaturization of components and assemblies were vital for improved performance, which would later find applications in the consumer and industrial sectors.

Temco (Texas Engineering and Manufacturing Company), a $100 million company specializing in aviation electronics and missile guidance systems, was the next company Ling acquired using a stock-swap. Once again, the company changed its name, and Ling-Altec Electronics became Ling-Temco Electronics.

Ling-Altec had passed $40 per share in late 1959 after Continental Electronics landed the Polaris contract, but sank to $20 when the Corvus program was canceled and the increase in outstanding shares resulting from the exchange for Temco shares diluted their value.

Ling raised some extra cash by selling off his original enterprise, the electrical contracting operation, to the people who were managing it.

1961: $192.8 Million

Ling did not have to wait long for his next target: the Dallas defense company Chance-Vought, a major aircraft and missile manufacturer best known for their F4U Corsairs produced for the Navy and Marines in World War II. In Ling's eyes, this company was a prime candidate for a takeover.

First, they were big, with sales in 1959 of nearly $250 million. Second, Chance-Vought was loaded with assets in other businesses, but they were not being used effectively. Their earnings averaged close to $6 per share and the stock was less than $30, despite a book value of more than $36 per share.

Chance-Vought would be Ling's first hostile takeover. In the spring of 1961, Ling once again went to several insurance companies to borrow short-term cash to finance a tender offer. Chance-Vought's CEO, Frederick Detweiler, did not want the company to be taken over. He immediately launched a civil anti-trust suit, arguing that the merger would "foster other mergers and acquisitions involving electronics and aerospace firms, thereby causing a lessening of competition and a tendency toward monopoly."[2]

Contrary to popular opinion, one does not need to buy 51% of a company to gain controlling interest. Ling acquired roughly 40% of the outstanding stock (400,000 shares) on the open market and by making a tender offer to existing shareholders for 150,000 shares at $43.50 per share, a 50% premium over the current $29 price. Ling got a $6 million short-term loan from the American Life Insurance Company, and by October Ling-Temco committed about $10 million, most of its working capital, to buying Chance-Vought stock.

But at the moment, LTV had an empty treasury, more than $64 million in long-term debt, interest payments of more than $5 million per year, a falling stock price and, as a result of the struggle, a board that did not want more of the same which could jeopardize the future of the company. Chance-Vought, it turned out, was in worse trouble than anyone had realized, as they had several operations losing cash and at least one that was approaching bankruptcy. Something had to be done to clean up Ling's balance sheet, or LTV would soon be bankrupt too.

To raise money to meet short-term loans, Ling quickly sold off several Chance-Vought subsidiaries, reduced his management force from 700 to 166 and took write-offs amounting to close to $34 million. Short-term debt was then transformed into longer-term obligations. But this wasn't enough.

Because of the write-offs and other costs associated with the takeover, LTV reported a loss of $13.2 million ($4.82 per share) despite sales of $192.8 million. The company had current assets of $123.6 million against current liabilities of $87.6 million — a ratio hardly indicative of a healthy operation. Investors responded by selling their shares, causing the stock to drop 63% from $42 just prior to the takeover, to a low of $15.40.

Project Redeployment

To beef up the balance sheet, Ling initiated a scheme he called "Project Redeployment." Assets were consolidated into three main business groups, with each group set up as a separate, publicly-owned corporation:

1. LTV Aerospace (military aircraft)
2. LTV Electrosystems, Inc. (military electronics systems)
3. LTV Ling Altec, Inc. (sound equipment and electronics testing systems)

Through this "financial alchemy," assets whose value was previously locked up in the parent corporation now became marketable securities, the value of which would rise with the market price. And since LTV common owned most of these companies, their shares could now be used as collateral for new loans used to fuel new acquisitions — and at a higher value than the assets were previously assessed.[3]

This experience taught Ling that the future growth of LTV should not be contingent on the military-industrial sector, which could suddenly cancel contracts, or be overly dependent on any one business. Diversification was the key to survival because no matter how adversely the economy impacted one sector, chances were it would not impinge upon the others. He decided that, to achieve a balance, no division should account for more than 30% of the company's sales, nor should any division concentrate business in fields related to other parts of the company.

1966: $1,459,000,000

Ling then cast his eyes on his most ambitious takeover target to date: Wilson & Co., the nation's third largest meat packer. With sales of more than $1 billion, it was more than twice the size of LTV. Meat packing was not an exciting business: the industry had a reputation for slow growth, large capital requirements and minuscule profit margins. The company's 2.4 million shares were selling for around $50, valuing the company at less than $125 million. For Ling, here was another company whose parts seemed to be worth more than the whole, and his greatest opportunity for another Project Redeployment.

Wilson's primary product was fresh meats, but they owned subsidiaries dependent upon animal byproducts: Wilson Sporting Goods (footballs from pigskin and tennis rackets from animal guts, and a major manufacturer of sports equipment), Wilson Pharmaceuticals (hormones, steroids and other drugs from animal

organs), pet foods (using meat unfit for humans) and soap processed from fats. At the time, sporting goods and pharmaceuticals were growth businesses; meat packing and pet foods were not.

In December 1966, Ling initiated Operation Touchdown, offering $62.50 in cash (a 25% premium) for each share of Wilson common. He hoped to gain 750,000 shares of Wilson common on the open market, and the rest through a tender offer to existing shareholders. Eventually he acquired 1.312 million shares at a cost of $82 million.

LTV was now a $1.8 billion corporation, but now there were 4.7 million shares outstanding, with long-term debt rising to $363 million. How he eliminated that debt from LTV's books astonished even the savviest traders on Wall Street.

First, Ling transferred the bulk of the debt into Wilson's books, thereby making the acquired company pay for its own acquisition. Then, as he had done before with Project Redeployment, Wilson was broken out into three separate corporations along the company's main product lines: Wilson and Company Meat Processors[4], Wilson Sporting Goods and Wilson Pharmaceutical and Chemical.

Each of the three new companies was authorized to issue its own stock, the bulk of which was held by the parent company, LTV Inc. The rest was sold to the public.

With these funds, LTV Inc. had enough to pay off the bulk of the debt on Wilson's books. By autumn of 1967, LTV's equity in these three companies had a market value of approximately $250 million. Wilson's acquisition cost came to around $6 million in short-term debt, plus an additional $5.7 million per year to service the $5 preferred issue. LTV stock peaked at 169½ and was listed number 14 in the *Fortune* 500.

During this time, LTV acquired a variety of companies: Greatamerica Corporation (parent company for Braniff Airways, National Car Rental and a number of insurance companies and banks) for $300 million worth of new 20-year LTV 5% debentures payable in 1988, plus warrants to buy additional shares of LTV common stock. Factored out, LTV was issuing nearly $500 million worth of new debt to buy Greatamerica. In 20 years, LTV would have to pay back those debenture holders nearly $500 million while paying out nearly $25 million every year in interest. Later the company purchased a majority interest in the Jones & Laughlin Steel Corporation of Pittsburgh and Okonite, a maker of wire and cable, for $31.7 million in cash, much of which was borrowed from banks using LTV subsidiary shares as collateral.

The Great Bear

Late 1968 through 1970 saw a major recession, and it was during this time that the cracks in a company built on a complex structure of equity financing became apparent.

When the stock market crashed, stock prices of LTV and its subsidiaries crashed too. Wall Street now woke up to the fact that Ling's unique brand of "growth through acquisition via debt and redeployment" alchemy depending on a rising stock market generating ever-higher stock prices to use as collateral was no longer sustainable. Even worse, LTV was comfortable with a low ratio of assets to liabilities, high long-term debt » *continued on page 39*

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DIAMOND RINGS Capitalizing on Social Trends

By Sara Kohles

From bridal gowns to multiple tiered cakes, elaborate weddings have become an American tradition: a tradition that usually starts with a trip to the jewelry store. Today, diamond engagement rings symbolize the couple's everlasting love for each other. Yet the origins of matrimonial diamond rings are considerably more materialistic, arising from the confluence of advertising campaigns and the deregulation of engagement and marriage contracts.

While De Beers and Madison Avenue are generally credited with masterminding the rise of diamond matrimonial rings in the 1940s, '50s and '60s, several additional contributing factors are evident. Even before the advent of the famous De Beers US marketing campaign in 1939, diamond imports were dramatically rising. Strong economic growth during and after World War II certainly aided sales of luxury goods like diamonds, as, eventually, did demographic trends that increased the number of young adults. But neither factor explains why *diamond matrimonial rings*, of all the luxury items swamping the post-Depression economy, enjoyed such success.

According to Margaret Brinig, the Fritz Duda Family Chair in Law at Notre Dame Law, eradication of the "breach of promise to marry" action was the single most influential factor in the rise of the diamond engagement ring tradition following the Depression. Beginning in 1935, six states stopped allowing jilted brides to seek restitution from their erstwhile fiancés. By 1945, 16 states had abolished the action.

Diamond rings, Brinig asserts, filled the hole left by the defunct breach of promise actions, which had provided women with financial security at a time when many people still viewed marriage as more of a career path than a romantic relationship. For women, marriage opportunities were inversely related to their age and their sexual history. A failed engagement left a woman older and was humiliating, particularly if her virginity was no longer intact. In states where the law no longer protected jilted brides, society faced a quandary: how to compensate women for the losses they suffered from failed engagements.

Instead of opting for any sort of paper contract, like a prenuptial agreement or performance bond, to fix the problem, couples turned to diamond rings to solve their dilemma. Diamond rings had symbolized betrothal in America since the 1840s, but their use had largely been restricted to the most affluent members of society. When the African diamond rush of the late 1800s flooded the market, however, diamond jewelry became a viable option for middle and even lower class consumers.

By the late 1930s, therefore, most Americans were familiar with diamond engagement rings and could afford to buy one commensurate with their budgets. The average retail price of a diamond engagement ring was $80 ($1,280 in 2011 dollars) compared to today's average of $5,200. Nudged along by Madison Avenue, many saw diamond rings as a natural form of collateral — as something valuable that a jilted bride could keep as compensation if her

would-be husband absconded. Diamond engagement rings therefore joined the list of matrimonial requirements alongside white wedding gowns and something borrowed and something blue.

The need for a physical asset as security was also driven by the transformation of romantic relationships. Previously, it was customary for couples to meet at home and be entertained by family. After the economic hardships of the early 1930s, couples starting meeting outside of the household because many families no longer had the money or facilities to entertain guests. Instead, men began inviting women to activities outside of the home. The ritual of dating thus evolved into a type of economic exchange where the male paid for food and entertainment in return for female companionship. As the relationship escalated, so did the value of the "gifts," culminating in a diamond engagement ring in return for lifetime companionship.


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Model Nina Huby wears an array of diamond jewelry from the 1972 collection by De Beers.

In 1939, De Beers hired an advertising agency, N.W. Ayer, to conduct research about why people bought diamond jewelry. Ayer concluded that people bought diamond jewelry for the emotional value. In an early report Ayer claimed, "There was no direct sale to be made. There was no brand name to be impressed on the public mind. There was simply an idea – the eternal emotional value surrounding the diamond." The sentimental connection to diamonds, in other words, existed *before* De Beers launched its marketing crusade in America. The transformation of an essentially common gemstone into the envy of all women was not a De Beers success story. Rather, the diamond cartel capitalized on the opportunity created by pre-existing attitudes, changes in the legal code and courtship rituals.

That is not to say, however, that advertising played no role in the rise of the matrimonial diamond market. N.W. Ayer created an immense advertising campaign meant to reach American consumers from every direction. Diamond slogans appeared in newspapers, magazines, on the radio and in motion pictures, which showcased movie stars wearing diamonds. An especially notable product placement occurred in the 1941 film, *That Uncertain Feeling*, when actress Merle Oberon wore $40,000 ($611,000 in 2011 dollars) worth of diamond jewelry. It became common to give celebrities diamond jewelry to wear on and off stage. Ayer even managed to change the name of a film from its original title, *Diamonds are Dangerous,* to the much more marketing-friendly *Adventures in Diamonds*. In 1946, 125 top newspapers published a weekly display of celebrities with descriptions of the diamonds they recently wore.

Exploiting the loss of the breach of promise action and changing courtship customs was just the beginning for De Beers and its Madison Avenue marketing moguls. Another opportunity was created when millions of men were conscripted into service during World War II. Loved ones needed something to secure their promise to wed after the war. Concerned that a long engagement might end with a KIA telegram from the War Department, women sought the physically hard but emotionally warm collateral diamonds represented.

Ayer therefore devised an ad campaign focusing on reaching soldiers and their would-be spouses that portrayed diamond rings as a pledge to marry upon returning from war. War also created a social environment on the home front characterized by a surfeit of single women. For women, the chase to the altar became even more competitive, and the security afforded by a diamond ring became more necessary than ever.

In the wake of the war, diamond sales in Europe were bleak, so De Beers again looked to N.W. Ayer to increase US sales. In 1948, De Beers began asserting that "A Diamond is Forever," arguably one of the most famous advertising slogans of the 20th century. The tagline promoted the product's emotional impact but also enabled De Beers, a lucrative cartel controlling 80% of the world's diamond trade, to control market prices by keeping the secondary market in check. By limiting the secondary market for diamonds, however, De Beers also eroded their value as collateral. Diamond rings could be hocked, of course, but increasingly their value was as a bonding mechanism, as a signal that the man was serious about the engagement and, eventually, was committed to continuing the marriage.

During four decades of progressive marketing, De Beers managed to grow the value of the US diamond industry from $23 million in 1939 ($372 million in 2011 dollars) to $2 billion in 1980 ($5.46 billion in 2011 dollars). Yet De Beers' advertising costs were modest, ranging from as little as $200,000 to a maximum of $10 million per year. Dollars spent years ago still resonate to such an extent that diamond advertising appears to be almost as robust as the product itself. But again, marketing was only part of a much more complex social picture. Economic growth provided the increased purchasing power but ultimately social conditions, keenly tracked and exploited by De Beers and its advertising agencies, induced Americans

to funnel some of their higher incomes into diamonds.

As the sanctity of marriage evolved, so did the diamond industry. After diamond rings became an established tradition, De Beers focused on tapping a new market, married women. A new style of diamond rings called eternity rings was promoted to married women as a way to rekindle romance. Eternity rings became especially popular in the 1980s, after the divorce rate had skyrocketed to about 50%. Eternity rings became a type of post-wedding signal of continued male interest in, and material commitment to, seemingly fragile relationships.

Today, singles are entering into marriage at ever-older ages because they want to first establish careers and financial stability. College loan debt has also been a contributing factor in deferring marriage. With graduates averaging $20,000 in debt, expensive weddings and engagement rings are taking a back seat to repaying loans. Again, the diamond industry has responded to changing social trends and economic pressures. Promise rings, a promise to get engaged in the future, are becoming a popular option among today's couples. Just as engagement rings act as a bond to get married, promise rings offer a type of signal proving commitment to a relationship.

Early marketing focused primarily on men purchasing diamonds for women. By the late 1960s, feminists challenged the traditional market and sought the creation of a new one composed of female consumers independent of their male counterparts. De Beers took up the challenge. While still promoting the traditional role of diamonds as matrimonial gifts, new advertisements portrayed diamonds as "right hand" rings suitable for single, independent women. Successful in the 1960s, the right hand ring campaign has made a comeback in recent years. In 2003, De Beers headlined a new advertising promotion centered once again on independent women "worthy" of buying diamonds for themselves. The "Raise Your Right Hand" promotion successfully aided non-bridal diamond jewelry sales, which, buoyed by the "wealth effect" created by the housing boom, increased 15% in the campaign's inaugural year.

Throughout the company's history, De Beers has been able to identify changes in culture and adapt their product to exploit those changes. Whether they will do so forever, however, remains to be seen as we enter yet another period of marital and societal evolution. $

Publicity photo of actress Gwen Lee's proposal, 1930s.

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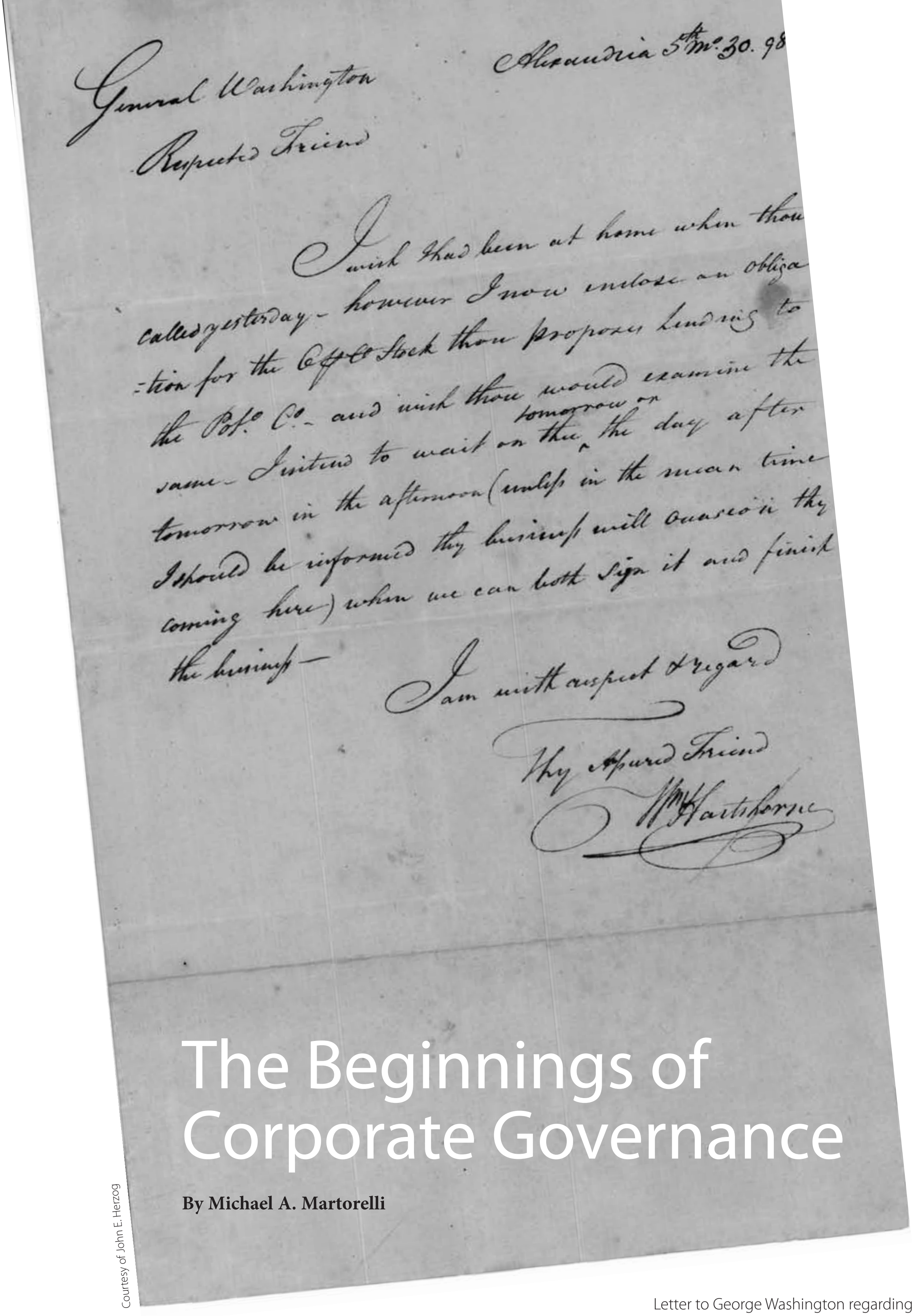


General Washington Alexandria 5th mo. 30. 98

Respected Friend

I wish I had been at home when thou called yesterday - however I now enclose an obligation for the C&C Stock thou proposes lending to the Potc. Co. - and wish thou would examine the same - I intend to wait on thee tomorrow or the day after tomorrow in the afternoon (unless in the mean time I should be informed thy business will occasion thy coming here) when we can both sign it and finish the business -

I am with respect & regard

Thy Assured Friend

Wm Hartshorne

Courtesy of John E. Herzog

Letter to George Washington regarding shares in the Potomac Company, 1798.

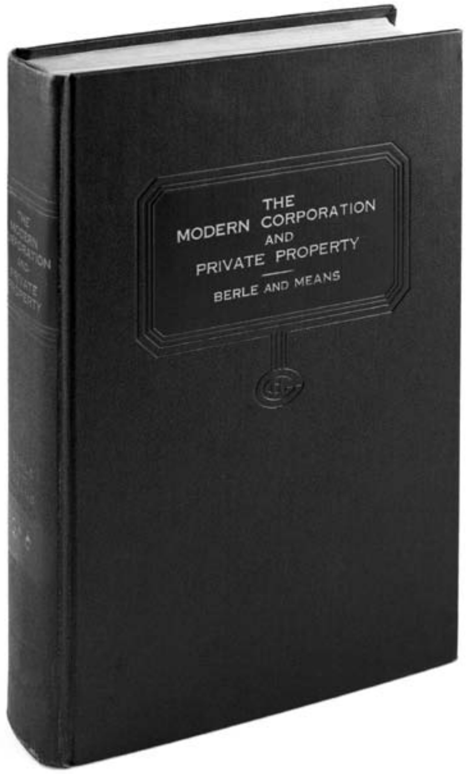
The Beginnings of Corporate Governance

By Michael A. Martorelli

During the next few months, shareholders of publicly-held companies will be asked once again to use their voting power to select members of their Boards of Directors, approve independent auditors and offer opinions on executive compensation and other corporate governance proposals. With each passing year, it seems that those firms are being asked to cope with a broadening variety of congressionally mandated or SEC-generated regulations aimed at empowering shareholders. Working through those shareholders, society also seems to be demanding more accountability from corporate managers on traditional matters, such as executive compensation and proxy access, as well as more modern issues like sustainability and diversity.

It has been just over 80 years since the publication of *The Modern Corporation and Private Property*, a seminal work in corporate governance by Adolf A. Berle, Jr. and Gardiner Means. An article in the Fall 2007 issue of *Financial History* described that book's central themes, one of which involved the conflicts of interests between principals (shareholders) and their agents (executive managers). The authors' depiction of the "agency theory" and its consequences have been studied, altered, challenged and referenced ever since.

Identifying shareholder/manager conflicts and various corporate governance techniques did not begin with Berle and Means. The roots of that problem can be found in provisions attempting to deal with the conflicts between owners and managers in the re-chartering of the Dutch East India Company in 1623. And in 1776, Adam Smith identified the divergent interests of owners and managers as an insuperable problem for the joint stock trading companies then existing in many countries, especially England, France and the Netherlands. Americans began to confront those conflicts in 1784. On the eve of another shareholder proxy season, it seems useful and instructive to review some early experiences with corporate governance. Berle and Means may have first formalized the academic discussion of this issue, but they certainly were not the first to acknowledge it.



Collection of the Museum of American Finance. Photo: Alan Barnett

Original edition of Berle and Means' seminal work on corporate governance, *The Modern Corporation and Private Property.*

The Potomac Company

In 1784, George Washington obtained charters from Virginia and Maryland for the incorporation of The Potomac Company, America's first business enterprise. He was part of a group hoping that firm would make the Potomac River navigable to the west of Great Falls (near Georgetown) by clearing away debris and building a series of canals and locks. They hoped the river would become an important corridor of transportation to the hinterlands.

The legislatures in Virginia and Maryland included provisions for the election of a president and four directors in the company's articles of incorporation, and gave those men full power over the company's activities. Both states required those officers to report the results of their activities to all shareholders once a year. The company's shareholders, in turn, annually selected a committee to review those reports on behalf of their fellow stockholders. After running into financial difficulties in 1828, the Potomac Company's operations were acquired by the Chesapeake and Ohio Canal Company. The C&O's charter incorporated all the elements of the Potomac Company's, including its provisions for corporate governance.

The company operated successfully throughout much of the next six decades; it was forced into receivership only after a lack of funds prevented it from making repairs caused by severe flooding in 1889. Yet the C&O's experience with corporate governance was far from satisfactory. After the State of Maryland purchased a sufficient number of shares to gain control of the company, the directors became political appointees; with little or no stock, they had no personal stake in the company's success and yielded to management on virtually every important issue.

Those directors appointed as president of the company a man whose sole qualification was his loyal service to the Democratic Party. They also banded together to veto many resolutions put forth by minority shareholders. In other states, internal improvements such as canals were built, owned and operated by state agencies. In Maryland, the Board of Public Works merely represented the state at stockholder meetings of the C&O Company, and did not exercise the oversight common to other public works agencies. As noted above, the C&O operated successfully during most of its 66-year lifespan, but it never overcame the conflicts between its owners and managers.

New York's 1828 Revised Statutes

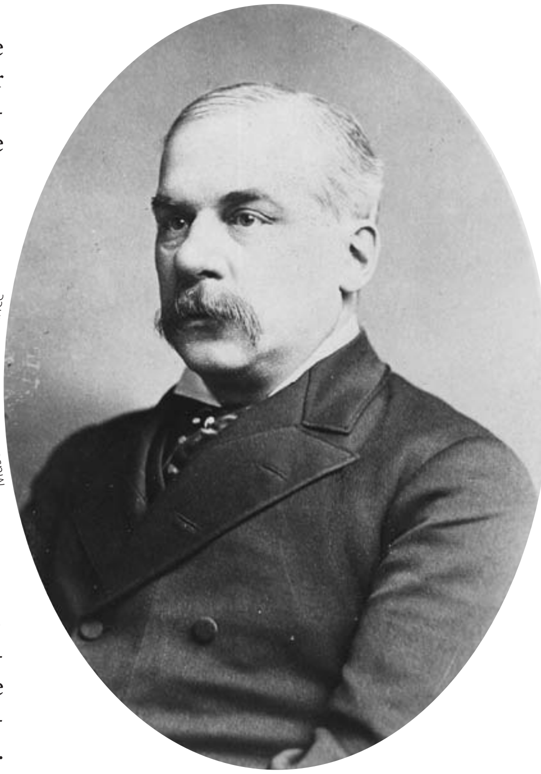
The corporation emerged only gradually as the preferred form of organization for fledgling businesses in early America. But by 1825, many states had granted charters for the incorporation of more than 2,000 firms. New York was very active, granting more than 800 charters between 1790 and 1825. However, the body of corporate law governing the activities of those companies was not well-developed. New York had no financial reporting requirements or listing requirements; it had no statues regulating the issuance of publicly-traded securities, and few defining or protecting the rights of stockholders. The legislature was reluctant to intervene in the internal affairs of corporations and declined to approve several proposals specifying certain shareholder rights. Moreover, while the courts acknowledged the applicability

of fiduciary law to individual corporate directors, they did not acknowledge their jurisdiction over the actions of corporations. As in other states, however, the lawmakers were aware of the power possessed by banks that were authorized to create money by issuing bank notes and similar instruments; so New York did limit the number of banking institutions.

Given the weak nature of the corporate regulatory regime, it was not surprising to see many unscrupulous speculators among the ranks of men who formed corporations in New York. They were particularly aggressive in seeking charters for insurance companies; those firms could not issue bank notes, but they were authorized to lend money. Founders were able to borrow money from the companies they were establishing, then use their large shareholdings to elect themselves directors. From that platform, they could authorize the company to lend them back the funds they had borrowed and then use those funds to invest in other companies. Alternatively, they could use the company's resources as collateral to finance their personal investments in other companies. Those holdings would enable them to gain control of additional firms' boards and use those companies' resources to finance even more investments.

By aggressively using borrowed funds, the voting power of their shares and the credit available in the securities markets, groups of speculators were able to control interlocking blocks of stock. With such control, those investors were able to freely ignore the traditional rules of prudent decision-making; instead of acting in the interests of all the corporation's stockholders, they were able to divert many firms' resources to meet their own personal desires. Inevitably, those poor decisions and inefficient allocations of resources led to financial difficulties for many institutions.

In July 1826, six of the 67 firms traded on the New York Stock Exchange suddenly failed. Those failures sparked a broader financial panic, since those firms collectively had more than $2 million in outstanding notes/loans to speculators whose investments were declining precipitously following the bursting of a stock market bubble. No amount of additional insider transactions and cross-linked lending could protect the firms supported by those funds; during the next two years, another dozen NYSE companies would fail.



Museum of American Finance

J.P. Morgan

In January 1827, Governor DeWitt Clinton turned the outrage expressed by the press, the District Attorney, the public and himself into a legislative proposal that would become the Revised Statutes of 1828. Among other provisions, that set of regulations prohibited the exchange of capital or securities between corporations, the use of securities as payment for stock subscriptions, loans to stockholder and directors above a certain amount, purchases of a corporation's own stock and acceptance of a corporation's own stock as payment for debts.

They required all financial corporations to submit to the state annual financial statements, and stipulated criminal penalties for violations of the law. In addition, the Statutes gave New York's courts broad powers to deal with a corporation found to be conducting transactions not expressly permitted by its charter; judges could halt a corporation's operations by injunction, inspect its books, remove its directors, appoint a receiver to seize control of its assets and enforce the personal liability of its directors in cases of fraud. These sweeping rules established the power of a heretofore reluctant state to exercise tight supervision and regulation over the activities of the corporations to which it granted charters. Directors and large shareholders would never again have the freedom to act purely in their own interests.

Bankers and Governance

With their voracious capital requirements, railroads were the first private enterprises that needed to raise extremely large sums of money from outside investors. Those capital needs increased after 1870 as those companies expanded through internal growth and merger/acquisition. Investment banking firms led by J.P. Morgan & Co. (London) and Drexel, Morgan Company (New York) shifted their basic business from selling and trading government securities to helping railroads raise money by selling stocks or bonds to institutional investors in Europe and the United States.

J. Pierpont Morgan himself became an especially active banker to the railroad industry. He believed that a firm issuing securities on behalf of a client also had a responsibility to the buyer of those instruments. Morgan first accepted that obligation in 1879 after he organized a syndicate to help the majority shareholders of New York Central sell a large portion of their shares. Most of the buyers were English institutions, whose managers had little — if any — visibility into the workings of the company whose securities they had just purchased. Morgan became their representative on New York Central's Board of Directors.

The practice of bankers joining boards became quite common among corporations as diverse as AT&T, Baldwin Locomotive, International Harvester and US Steel. Those banker representatives did not become involved in day-to-day operations, but their presence stood as a warning to any operating managers who might have been tempted to ignore the needs of shareholders and bondholders.

Those banker board members may have fulfilled a useful watchdog function. But in the case of the Morgan men, they also pursued their famous partner's agenda, particularly its "no competition" element. Morgan was interested in having "his" railroads pay their interest and dividends on time, and not in the cutthroat route and price competition that pitted the companies against each other. Over the years, he cajoled numerous groups of railroad executives into forming agreements not to cut rates, build unnecessary and duplicative lines or otherwise engage in wasteful competition.

His partner/directors' exercise of their unlabeled — but very effective — corporate governance powers may have improved the profitability of the companies on whose boards they sat, and increased the investment returns of their stockholders and bondholders. However, those actions also encouraged monopolies, price-fixing schemes and other anti-competitive behavior. Beginning in the late 1880s, populist lawmakers and other critics of the "Money Trust" lobbied hard to obtain Congressional passage of the Interstate Commerce Act (1887), Sherman Act (1890) and Clayton Act (1914). Each outlawed different anti-competitive practices favored by Morgan et al., and robbed a small group of industrial capitalists of their role as arbiters and watchdogs of corporate behavior. Once again, the state moved to exert more influence over corporate directors, and to limit their pursuit of totally parochial interests.

Managers Without Control; Shareholders Without Power

By the beginning of the 20th century, the era of autonomous operating managers whose shareholdings gave them control of the company was giving way to one characterized by professional operating managers with small amounts of stock, and large numbers of stockholders with no managerial authority. The separation of ownership and control had begun with William Vanderbilt's 1879 sale of stock in New York Central. It continued throughout the next few decades as men named Carnegie, Goodrich, Guggenheim, McCormick and Rockefeller divested portions of their holdings in familiar and often eponymous companies.

By the end of World War I, giant corporations run by professional managers dominated most sectors of the economy. However, the growing army of small shareholders in those firms had nowhere near the authority over their companies' activities as earlier groups of majority/plurality stockholders. The separation of ownership and effective managerial control caught the attention of some of the leading thinkers of the day.

Louis Brandeis was a crusading public interest lawyer who had paid close attention to the Pujo Committee's 1913 investigation of the "Money Trust." Throughout that year, he wrote several articles for *Harper's Weekly* addressing the different roles and powers of managers and shareholders. The following year, they were collected and published as *Other People's Money and How the Bankers Use It.* Brandeis lamented the complexity of the modern corporation. His main problem with the separation of ownership and management concerned shareholders' dependence not only on corporate managers, but also on the investment bankers who acted as the power behind the throne. He believed inefficiently managed corporations could do more damage to their smaller competitors and to the public at large than to their own small shareholders.

Whereas Brandeis called for a return to a prior era characterized by small companies and active owner/managers, Harvard University professor William Z. Ripley acknowledged the permanent presence of large corporations, powerless shareholders and unaccountable managers. But he raised some new alarms against that reality.

In the early 1920s, Ripley was one of several Harvard economists trying to gauge the full implications of a trend that saw stock ownership rise from about 3% of the population in 1914 to about 25% of all households a decade later. In 1925, he identified the dispersion of those stock holdings as an even more significant problem than the long-acknowledged separation of ownership and managerial authority. Ripley identified the recent trend of issuing non-voting Class A stock as a new obstacle to any attempts by common shareholders to re-assert some power through their election of directors. In speeches, magazine articles and books, he spent most of the next two years inveighing against the lack of financial disclosure by corporations, and the use of layered holding companies, no-par stock and other tools to limit the ability of shareholders to exert any pressure on entrenched managements.

Berle and Means and Beyond

The protests and writings of men such as Brandeis and Ripley encouraged the NYSE to prohibit non-voting common stock, and to impose tighter requirements for financial disclosure. But they did not lead to any tangible changes in the corporate governance rules of the federal or state governments. In 1932, Berle and Means gave voice to an even wider discussion of that topic. Eventually, only the stock market crash and subsequent Great Depression persuaded Congress to enact a new regime of regulation, registration and disclosure. As would become painfully obvious throughout the next 80 years, none of them eliminated the inherent conflicts of interest between shareholders and managers, or obviated the need for additional actions in the realm of corporate governance. $

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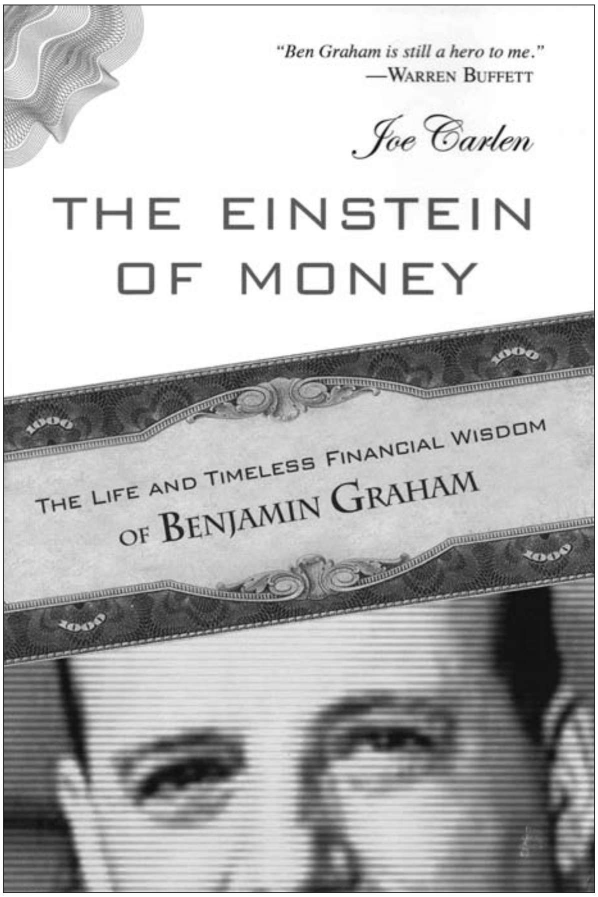
The Einstein of Money: The Life and Timeless Financial Wisdom of Benjamin Graham



By Joe Carlen
Prometheus Books, 2012
368 pages with index, notes and photographs
$25.00

This is a welcome work in many ways. For the millions who know Graham only through his seminal work, *The Intelligent Investor*, the story of the man behind the Bible of value investing adds depth and camaraderie to the shrewd calculus of the spread sheet. For the more casual reader with an interest in history or business there is plenty here too, spanning the bulk of the 20th century. And for the investor keen for an edge but not quite willing to undertake Graham's original tome at a solid 600 pages, this volume, half the volume, serves as sufficient summary.

Carlen takes a casual, even chatty tone. For the most part that helps take the edge off the drearier aspects of the dismal science. Occasionally it seems a bit gratuitous, as if the author were just gossiping with the reader about a mutual friend. Perhaps that is the peril of every biographer, to resist being enthralled by the subject.

The interesting and effective technique that Carlen takes is alternating chapters between one that is mostly biography followed by another that is mostly a synopsis of a key point of Graham's investment philosophy, usually as expressed in *The Intelligent Investor*.

The edition Carlen quotes most often is the 2003 revision with commentary from Jason Zweig, a financial journalist and columnist of perspicacity and wit, and a member of the Museum's editorial board. Carlen includes several quotes from Zweig on Graham, a powerful triangulation on the subject.

Two points about the book jump to the fore. On the technical side, Carlen does a thorough job of summarizing the key points of Graham's philosophy of value investing. It might not be enough for an investor to finish the book and open a brokerage account, but it certainly conveys the guts of value investing.

On the personal side the revelation is that for a life crowned with financial success and a legacy unblemished, Graham's life was afflicted with tragedy. Most notably the illness and death of many close family members. The sudden passing of his grandfather and his father in his youth meant the demise of the family's house wares business and dropped the survivors to near destitution. It was an annealing experience for the young Graham.

That Graham persevered against repeated setbacks, serious ones, is a testament to his character and to the strength of his approach to investment. Carlen writes, "Remarkably, by year-end 1935 Graham's selections of underpriced securities had proved so lucrative that all previous losses were recouped and the [investment fund] account was back in positive territory relative to 1929."

As noted, Carlen does a solid job of presenting the essence of value investing. It is a bit uneven, with some fairly technical material coming early, but the author accomplishes his aim with a minimum of charts and graphs that could chill the interest of a casual reader. It might be possible to read just the odd-numbered chapters for a quick biographical read, and then just the even-numbered chapters for a flash review of value investing. But what would be the fun in that?

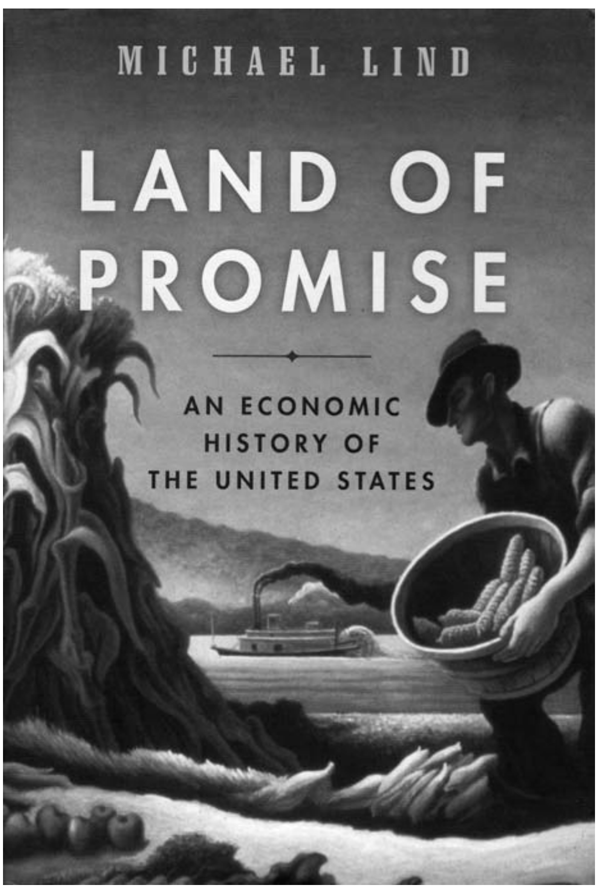
Two small uneven spots bear a mention. Carlen forcefully reiterates Graham's assertion that an investor should view an equity investment as the equivalent of buying the whole company, even if the actual stake is just a few shares. That was and remains a sound philosophical approach to investment. And the stories of how Graham was the original activist shareholder, forcing companies to unlock value are rich and rewarding. But for the vast majority of individual investors, effective ownership is a pretty fiction. The holder of even many thousands of shares has no more real say in the decisions of most companies than a

sports fan in the stadium has a say in the decisions of the team.

The other style point is that while Carlen usually treats Graham with respect, even reverence, the author takes a scolding tone when relating his subject's love life. Graham was a bit of a man about town, especially in mid-life when his financial star was on its rise and his first marriage was disintegrating. The affairs and dalliances are fair material for a biography, but the author's obvious disapproval seems out of place.

That said, Carlen has done an admirable job on two difficult fronts, to bring to life a man whose existence is mostly legend, and also to summarize the pivotal investment approach that made that legend — and continues to make legends like Warren Buffett, Graham's most notable disciple. $

Land of Promise: An Economic History of the United States



By Michael Lind
HarperCollins, 2012
586 pages with notes and index
$30.00

Lind's thesis is that there have been not one but three American republics, each based on an economic model that arose from the ashes of the previous: the preindustrial, the steam age and the motor age. Lind also suggests that the nation is currently in the transition from that third age to a fourth, the technology age.

History buffs will delight in the author's emphasis that even as each new economic republic had its grand blossoming, the technologies that would ultimately bring it down were already in existence.

For example, the steam engine predated the American Revolution. Lind notes that a demonstration of a practical steamboat was held in Philadelphia at the time of the Constitutional Convention. Similarly, the motor age had its seed early in the steam age, and the technology age traced its roots to the defense-related computer developments during World War II and the early Cold War.

Another perspective could label the ages by fuel, with the age of wood and wind giving way to coal, then oil, then electricity. But, however they are named, Lind's point is that each successive age completely remade the American economy. There were winners and losers each time, in business of course, but also politics and society.

Early in the book he makes a fascinating observation, that political independence is not the same as economic independence. His frame of reference was that the American Revolution would have come to naught if the country did not have the resources and the resourcefulness to exploit them. That argument might prove enlightening to the many nationalistic groups through history that have sought independence. With well-placed contempt Lind notes that in its constitution, the Confederate States banned government investment in industrial improvement.

Although a hefty 480 narrative pages, *Land of Promise* is an easy read. The prose is close to eloquent early on, as Lind espouses his belief in the engines of ingenuity. The high tone is not quite sustained throughout, but the pace rarely drags. Chapters are subdivided into sections, some just a few paragraphs long. Mostly they follow the narrative, but some are asides and excursions.

Land of Promise is a book of great promise, mostly realized. It is wider than it is deep, but presents both interesting anecdotes and thought-provoking perspectives on the inter-relationship of the economy, society and politics. $

continued from page 11

from Virginia City, wrote a book about the vigilantes that was the first book to be published in Montana. According to Dimsdale, Yaeger identified Plummer as the gang's chief. He then claimed that the gang's password was "innocent," and that members of the gang "wore a neck tie fastened with a 'sailor's knot,' and shaved down to moustache and chin whiskers." Although many have subsequently questioned the existence of any such well-organized gang, Red's confession sealed Henry Plummer's fate.[1]

On January 10, 1864, after convincing the citizens of Bannack of Plummer's guilt, the vigilantes arrested Plummer and his deputies Buck Stinson and Ned Ray, marched them to gallows that Plummer had built and hanged them. At the gallows, Plummer cried and pleaded for his life, but after regaining his composure, he calmly asked for a "good drop," which was granted. In all, the vigilantes executed nearly 60 individuals from 1864-1870. They were active long after law and order was established in the area with the creation of the Montana Territory on May 26, 1864.

Vigilante excesses were apparent from the very beginning. On the day after Sheriff Plummer was hanged, vigilantes went to the cabin of José Pizanthia, a Mexican miner who was considered a nuisance, and demanded that he surrender. Pizanthia responded by shooting the two vigilantes who entered his cabin. The vigilantes then procured a howitzer from the home of Chief Justice Sydney Edgerton and fired three shells into the cabin. After extracting the dead man's body, they hung it on a pole and proceeded to fire more than 100 rounds into the corpse. Pizanthia's cabin was then set on fire, and his body was tossed into the conflagration. In June of 1864, the vigilantes hanged James Brady in Nevada City for the murder of "an Irish miner named Murphy" who later recovered from his wounds, and on March 2, 1866, vigilantes hanged James Daniels on Helena's infamous "hanging tree" with a pardon from the governor in his pocket.

Revisionist historians have attempted to vilify the vigilantes and exonerate Plummer, but the truth about his criminal involvement in the gold fields of Montana will never be known.[2] Most now agree that there was no well-organized gang working in the vicinity, but Plummer's past and his shady association with questionable characters in Bannack will continue to raise the specter of doubt. The vigilantes have long passed into the realm of legend in the state of Montana and tend to be highly revered by the state's residents. In fact, every Montana Highway Patrol officer proudly wears a shoulder patch emblazoned with 3-7-77, a vigilante code used in the Helena area.[3]

The motives behind the actions of the vigilantes have been attributed to politics, Masonic activity, factionalism arising from the Civil War and a whole host of other things. But, Peter Bernstein's observation that gold provokes "horrible acts by one people against another" probably comes closest to the truth.

The allure of gold throughout history has brought out the worst in people, and the vigilantes of Montana were no exception. After the miners took the law into their own hands in order to protect their gold, they ended up committing worse crimes than the outlaws they pursued. In the Old Testament, the long-suffering Job observes that wisdom "cannot be bought for gold, and silver cannot be weighed as its price." (Job 28:15) The Montana vigilantes certainly could have used more wisdom as they sought to right wrongs, but their overriding love of gold prevented wiser choices. **$**

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Notes

1. According to Cushman (1973), "Virginia [City] was believed to be full of spies who watched for rich shipments of gold. At a later date this was built up into a legend of intricate organization with spies, couriers who were ready to go flying along the trail at a moment's notice, bands of highway men with military chains of command, special handshakes, knotted ties, passwords and a single master mind. Judged by results little master minding was done. Men were robbed and brutally murdered by their own party. Other robberies were hastily got up affairs, ill planned and bungled."
2. See *Hanging the Sheriff: A Biography of Henry Plummer,* by R.E. Mather and F.E. Boswell.
3. The meaning of 3-7-77 is unknown. Allen (2001) writes, "The oldest, most popular interpretation of the numbers is that they represented an exact period of time — three hours, seven minutes, and seventy-seven seconds — that the vigilantes gave their targets to get out of town or face violent retribution. Another common version has the numbers as the dimensions of a grave: three feet by seven feet by seventy-seven inches." However, he believes the most likely interpretation is that the target should get a $3.00 ticket on the 7:00 pm stage to Butte and get out of town by order of the 77 members of the Helena vigilante committee or suffer the consequences.

James Ling

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and low cash reserves, while short-term obligations often expanded mightily (and were sometimes converted into additional long-term debt). Ordinarily this is a recipe for disaster, but in the rapidly-expanding economy of the 1960s, Wall Street analysts were too busy applauding Ling's triumphs.

The operating earnings and share prices of LTV's subsidiary companies were falling during this economic slowdown. Interest costs mounted as the credit markets tightened, making it extremely difficult to raise additional funds or generate a positive cash flow to pay interest and dividends. Meanwhile, customers for Braniff Airways, National Car Rental and Wilson Sporting Goods vanished; demand for steel likewise fell, a problem compounded by the rise of cheap imports, antiquated equipment and rising legacy costs occurring at the time. Lastly, the US Justice Department initiated another anti-trust, the result of which forced Ling to sell Braniff and the Okonite divisions, with additional cash coming from Greatamerica's Stonewall Insurance ($15 million), First Western Bank & Trust ($62.5 million), Wilson Sporting Goods ($63 million) and Wilson Pharmaceuticals ($16 million). Investors subsequently lost confidence in Ling and LTV. The same stock that traded for $169½ in 1967 collapsed to $7.125, a 96% decrease.

In May 1970, the LTV board of directors, under pressure from their major creditors, voted to remove Ling from the chairmanship. He was demoted to president, but he had no real authority. Ling resigned six weeks later.

LTV never fully recovered, despite acquisitions of metal and aerospace companies. By 1981, the rest of Wilson & Co. and its major subsidiaries, along with LTV Steel, LTV Aerospace & Defense and LTV Energy Products, were sold to meet debt obligations.

In 1984, LTV purchased Republic Steel for $770 million, but two years later when the cost of water freight dropped, it became less expensive to import Japanese and European steel to the West Coast than from the Midwest and East Coast. By 1986, LTV filed for Chapter 11. Although the company emerged a few years later, LTV again filed for Chapter 11 in December 2000. The following year, the company sought approval from bankruptcy officials to close their mills and have $2 billion in unfunded pension plans taken over by the Pension Benefit Guaranty Corp.

Ling started another conglomerate called Omega-Alpha and began buying up a number of companies. Many of these deals proved to be disappointments, and in 1974 he lost control of the company. By 1975, Omega-Alpha went bankrupt. His last attempt at a comeback came in 1980, when Ling and a group of investors raised $240,000 to finance Eugene Anderson, who announced he had developed a fuel additive that would double gas mileage. Anderson was later uncovered as a swindler, and the fuel additive was a scam. Ling and his investors lost all the money they had invested in the deal.

Ling died in December 17, 2004 of esophageal cancer at his home in Dallas. He was 81. $

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Notes

1. Ordinarily, this takes three years.
2. The suit was eventually dismissed.
3. LBO practitioners in the late 1980s and 1990s accomplished the same thing through their leveraged buyouts. The difference between them and Ling was that in Project Redeployment, LTV sold partial ownerships to the public, not entire businesses.
4. In 1969, Wilson and Company Meat Processors was further divided into four separate subsidiaries: Wilson Beef & Lamb, Wilson Certified Foods, Wilson Laurel Farms, Wilson-Sinclair and, later, Wilson Agri-Business Enterprises.

HOW MUCH DO YOU KNOW ABOUT FINANCIAL HISTORY?

TRIVIA QUIZ

By Bob Shabazian

1. What company raised $16 billion in 2012, making it the largest Internet IPO?
2. What three companies were combined in 1901 to form US Steel Corp., the world's first billion dollar company?
3. How long does the average $100 bill circulate before being replaced because of wear and tear?
4. What US government agency was established by the Coinage Act of 1792?
5. How much did hamburgers and French fries sell for when the first McDonald's franchise opened in 1955?
6. Name the country's first commercial life insurance company.
7. How much did the US pay for the purchase of the Louisiana Territory, which doubled the country's geographic size?
8. Which bank did the Duc de Richelieu call the sixth great European power, just after England, France, Prussia, Austria and Russia?
9. What was the first money market mutual fund?
10. Which four exchanges merged to create the Midwest Stock Exchange in 1949?

1. Facebook **2.** Carnegie Steel Co., Federal Steel Co. and National Steel Co. **3.** 89 months **4.** The US Mint **5.** 15 cents and 10 cents, respectively **6.** The Pennsylvania Company for Insurance on Lives and Granting Annuities, which was charted in 1812 and funded with $500,000 **7.** $15 million **8.** Barings Bank **9.** The Reserve Fund **10.** The Chicago Stock Exchange, the Minneapolis–St. Paul Stock Exchange, the Cleveland Stock Exchange and the St. Louis Stock Exchange